



TMS

User Manual

Version 1.2

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Software License Agreement

The Doremi software license agreement is available at the following website:

<http://www.doremicinema.com/warranties.html>

1 Introduction

1.1 Purpose

The purpose of this document is to provide guidance on how to use the Doremi Theater Management System (TMS) application.

TMS is based on a graphical user interface and allows the user to manage several servers connected to a common network.

1.2 Presentation

This document is structured according to the following sections:

- Section 1: Introduction – Overall presentation of the document
- Section 2: TMS User Interface Overview – TMS GUI Overview
- Section 3: Quick Start Guide – Guidance about using the TMS GUI
- Section 4: TMS GUI Tabs Description – Presentation of each individual tab of the TMS GUI
- Section 5: Annex A: New User Creation
- Section 6: Acronyms
- Section 7: Document Revision History

1.3 TMS Version

This document references the Doremi Theater Management System version number 1.0.4.

2 TMS User Interface Overview

The TMS GUI will automatically launch when logged in as "doremi". To launch the TMS GUI manually, go to the “**Start → Doremi Apps. → Theater Management**” menu. The TMS graphical user interface (GUI) will appear in the window showing the first tab the “Monitoring” tab, as presented below:

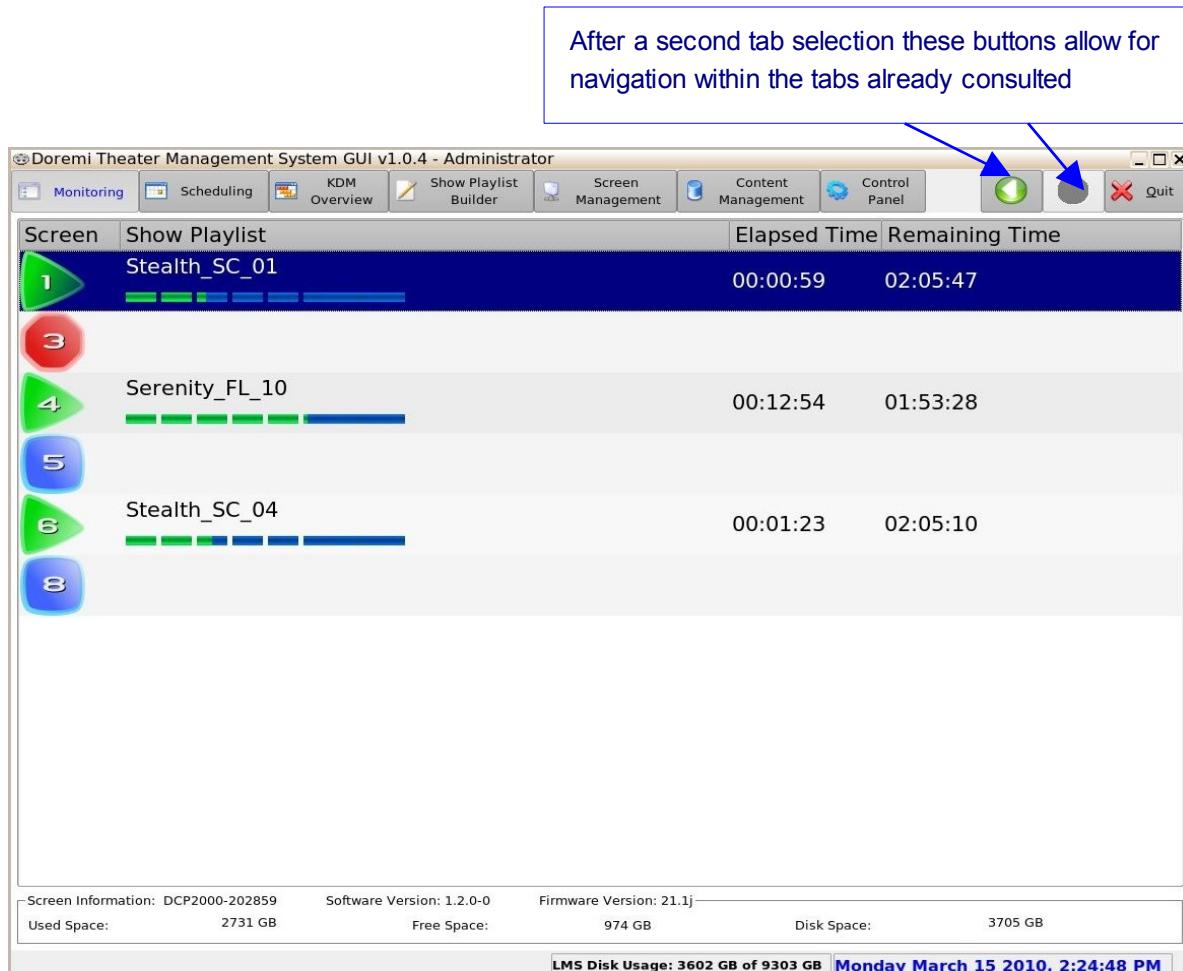


Figure 1: TMS Graphical User Interface (GUI) – “Monitoring” Tab

The TMS GUI is composed of a set of tabs that allow access to all available functions of the TMS. These tabs are listed below:

“Monitoring”, “Scheduling”, “KDM Overview”, “Show Playlist Builder”, “Screen Management”, “Content Management”, and “Control Panel”.

The two buttons on the top right corner with left and right arrow icons are backward and forward functions. They allow the user to go back to the recently viewed tab.

The bottom of the frame will display the complete date at the right corner and it will display the total disk space and available free space of the LMS. The font color will change to indicate the available free space. A yellow color represents 10-20% and red color represents below 10% of total available free disk space.

3 Quick Start Guide

This quick start guide section provides guidance on how to use the TMS GUI in order to configure screens, create and schedule SPLs, check associated KDM availability and manage the associated content ingest processes.

3.1 Logging In

To be able to configure screens, user needs to be logged in as "admin".

- Go to the "Control Panel" tab and click on the "User" icon as presented in Figure 44.
- The following window will appear:

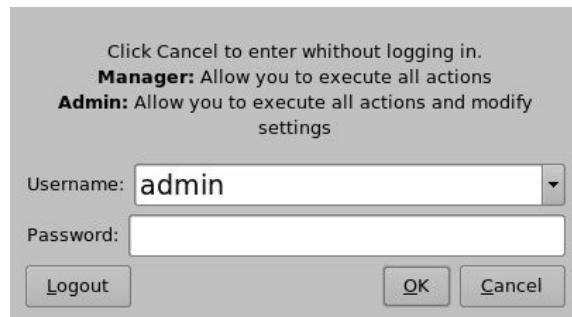


Figure 2: Authentication Window

- Select "Admin" in the "Username" field
- Enter the Admin password in the "Password" field (Doremi Labs, INC. has the default password)
- Click on "OK"
- User is now logged in as "Admin"

3.2 Screens Setting

- To perform the setup of the screens click on the "Servers" icon in the "Control Panel" tab (Figure 44)
- The "Server Edit" screen will appear, allowing the user to configure the screens in the appropriate manner (Figure 47)
- To add a server click on the "Add Server" button
- To remove a server select it and click on the "Remove Server" button

For each server define the appropriate settings:

- Select the server on the left side of the GUI.
- Fill in the General Information area – see Figure 3 below:

General Information	
Server Name:	intel-6TB
IP Address:	192.168.100.104
Management IP Address:	10.10.1.64

For ingest purpose
To send configuration file to screens

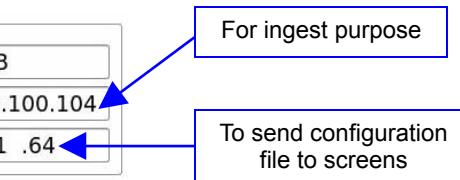


Figure 3: “General Information” Sub-Window

- Specify if it is an ingest server or not.

Box to be checked only for the LMS	Server Type
	<input checked="" type="checkbox"/> is an ingest server
	Auditorium Number: <input type="text"/>
	Serial Number: <input type="text"/>

Figure 4: “Server Type” Sub-Window

- For screen servers enter the auditorium number (usually between 1 and 32)
- The serial number field will be filled automatically once the "OK" button is clicked

Note: If the LMS Library resides on the TMS server itself, then the IP addresses are the same as the TMS. The Manager and Admin account information has to match the account information on that particular screen server.

- Click on “OK” when finished.

3.3 SPL Creation

If Show Playlists are complete then skip this section and proceed to Section 3.4.

Creating a Show Playlist to be ingested on the screen:

- Go to the “Show Playlist Builder” Tab
- On the left part of the window, select the composition (CPL) item(s) to add to the playlist. Select consecutive CPLs by using the shift key or use the "Ctrl" button to select multiple non-consecutive CPLs
- Click on “Add to Show Playlist” button to add all the selected CPLs to the SPL panel

Note: If no composition is visible on the left part of the tab, click the “Refresh” button – see Figure 29.

The available content will appear.

- The two arrow buttons allow the user to change the order of the CPL's, in the Show Playlist

panel. Refer to section 4.4 for SPL creation details

To add an automation cue to a Composition (CPL) present in the Show Playlist:

- Select the desired CPL on the right part of the "Show Playlist Builder" window
- Select the desired automation cue on the left part of the window
- Click the "Add to Show Playlist" button
- The user will be asked to define Automation Cue parameters - see Section 4.4.2.2.2 Automation Cues for detailed information

Note: Trigger Cues can be added to the Show Playlist. Refer to Section 4.4.2.2.3 Trigger Cue for the related procedure.

- Save the Show Playlist when finished by clicking on the "Save..." button on the top of the tab

3.4 SPL Scheduling

To schedule a Show Playlist playback follow the steps below:

- Go to the "Scheduling" tab - see 4.2 Scheduling Tab for additional guidance about this tab
- Click on the "Add Schedule" button
- The following window will appear:

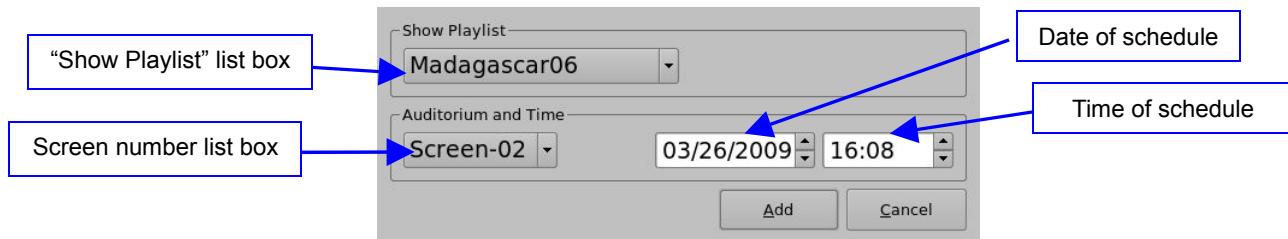


Figure 5: "Add Schedule" Window

- Select the Show Playlist that needs to be scheduled within the "Show Playlist" box
- Choose the Screen Number and the date/time that is to be scheduled
- Click on the "Add" button when finished
- The new schedule will appear on the main window of the "Scheduling" tab - see Figure 8
- If the SPL is not on the SMS then the TMS will initiate the SPL transfer to the SMS

3.5 KDM Uploading

A Show Playlist might contain encrypted CPLs. To identify an encrypted CPL look for the lock icon to the left of its name in the Show Playlist builder window. Each encrypted CPL requires a valid KDM. In that case make sure that a valid KDM exists for each encrypted CPL in order to be able to perform the playback.

- Go to the "KDM Overview" tab - see 4.3 KDM Overview Tab for additional guidance on this tab
- Check in the displayed list of available KDMs to see if there is one for each encrypted CPL in the Show Playlist
- If a KDM is missing click on the "KDM Upload ..." button in order to upload it - then follow the steps
- Use the the "Browse ..." button to select the proper KDM folder and upload the KDM - see Figure 15

3.6 Content Ingest Management

The Content Ingest Management tab will display the status of all ingest jobs. It will show the progress of the current jobs and it will list all pending jobs. Currently the TMS can execute transfers to 4 screens simultaneously. The CIM tab will allow users to cancel a CPL or SPL transfer. See 4.6 Content Management Tab for further details about this tab.

3.7 Logout

- To prevent unauthorized changes to settings and scheduling make sure to logout
- Go to the "Control Panel" tab and click on the "User" icon (Section 4.7 Control Panel Tab)
- The following window will appear:

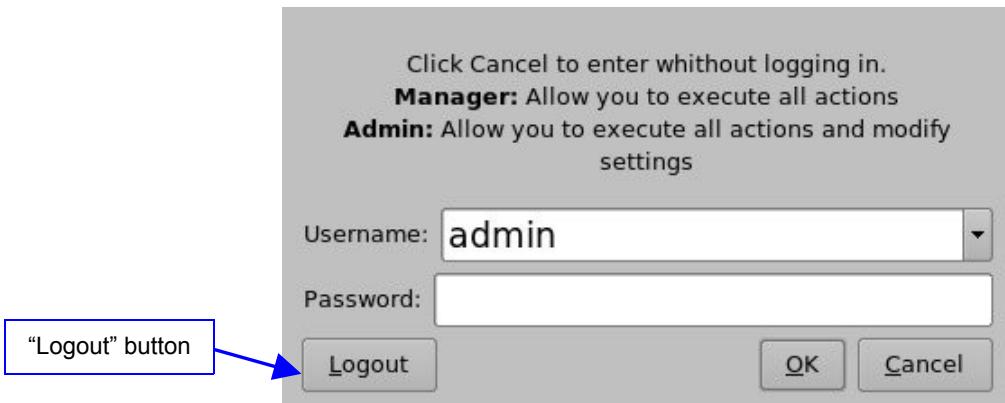


Figure 6: Authentication Window

- Click on "Logout"

4 TMS GUI Tabs Description

4.1 Monitoring Tab

- To enter the “Monitoring” tab click on “Monitoring” on the top of the GUI at any time during the TMS GUI usage

The “Monitoring” window is composed of two different parts:

- 1) The top part lists all the screens added to the TMS together with their states (offline, online, and playing).
- 2) The bottom part displays information about the selected screens.

4.1.1

Screens are listed vertically under the screen column header. Each screen is identified with an icon displaying the screen number inside it. The icon's color and shape reflects the current status of the SMS. Below are the different icons used.

- 1) Blue square indicates online and idle status.
- 2) Green triangle indicates online and playing content.
- 3) Red hexagon indicates offline.

A smaller icon can appear next to the screen number when the available free space drops below a certain threshold.

- 1) A warning icon in yellow indicates that the configured warning threshold (11% - 20%) for the remaining free space was reached.
- 2) A critical icon in red indicates that the configured critical threshold (10% or less) for the remaining free space was reached.

Note: The small warning/critical icon can be used to display some other warnings. Point the mouse over the screen icon to display the description of the error(s) or warning(s).



Figure 7: TMS GUI – “Monitoring” Tab, Screen Icons

To the right of the screen icon the following information is displayed only when the screen is in playback mode.

- 1) A Show Playlist name is displayed in conjunction with one or more bars beneath. The bars represent the different clips in the SPL. The short bar is for trailers and the long bar is for features.
- 2) Elapsed time
- 3) Remaining time
- To access the “Screen Management” tab associated with the selected screen double-click on the screen icon and the GUI will display the “Screen Management” tab – see Section 4.5 Screen Management Tab

4.1.2 Screen Information

The bottom part will display information specific to the server on a particular screen. By selecting a screen on the top the following information will be displayed.

- 1) Server Serial Number
- 2) Software and Firmware version
- 3) Total disk space, both used and free. The color of the free space will change if it drops below a certain threshold. The color yellow indicates a free space between 10% and 20%. The color

red indicates free space below 10% of total disk space.

4.2 Scheduling Tab

4.2.1 Standard Usage

- To enter the “Scheduling” tab click on “Scheduling” on the top of the GUI at any time during the TMS GUI usage
- The “Scheduling” tab is illustrated below:

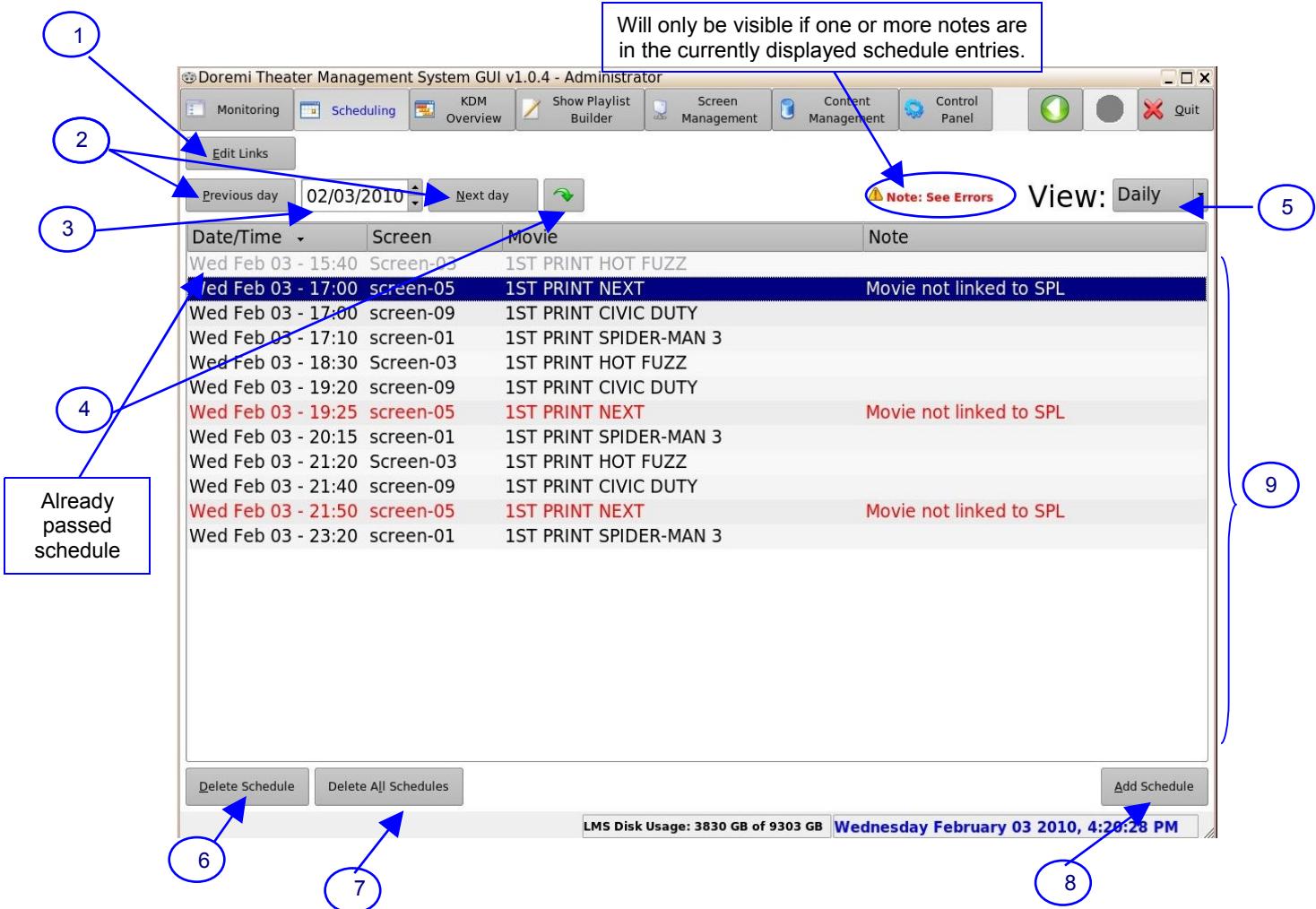


Figure 8: TMS GUI – “Scheduling” Tab

- Edit Links: this will link a specific movie name to an SPL
- Previous and Next: these buttons will move the schedule back or forward in time by the selected view period. It can be daily, weekly, monthly or yearly

3. The date selection will allow the user to specify the starting day of the schedule
4. Refresh button will refresh the scheduling window
5. View period will specify the period to display in the scheduling window starting with the day specified in the date selection
6. Delete Schedule will delete the selected entry from the schedule. The selected entry will be deleted immediately without confirmation
7. Delete All Schedules will delete the entire schedule on both the TMS and the screens associated with the system. A confirmation is required in order for the operation to be completed. Only a manager login can execute this operation. The operation will delete the schedule only; no content will be lost in the process
8. The Add Schedule button will allow the user to manually schedule an SPL on a specific screen at a specific time and day
9. Scheduling Window will list all the entries starting from the date in the Date Selection up to the period selected in the View Period

Each entry takes one line and is composed of 4 fields, as demonstrated below.

- 1) Date and Time
- 2) Screen Name
- 3) Movie Name
- 4) Notes

The font color will reflect the status of the entry. A black font is ready and the red font indicates an error. The error type will be reflected in the notes. A gray font is for past entries.

4.2.2 Manager / Admin Usage

In case user is logged in as "Manager" or "Admin", both will allow for a modification of settings. See Section 4.7.2 User Management for user log in and privileges. In this tab, it corresponds to:

- A schedule addition
- Schedule(s) deletion
- Links editing
- To add a schedule click on "Add Schedule"
- The following window will appear:

The screenshot shows a Windows-style dialog box with a light gray background. At the top left, it says "Add". Below that is a section labeled "Show Playlist" with a dropdown menu containing the option "Madagascar06". Underneath is another section labeled "Auditorium and Time" with a dropdown menu for "Screen-02" and a date/time selector showing "03/26/2009 16:08". At the bottom right of the dialog are two buttons: "Add" and "Cancel".

Figure 9: “Add Schedule” Window

- To schedule a playback of a Show Playlist for a given auditorium and time click on “Add” when finished
- The new schedule will appear in the schedule list
- Select the appropriate view mode
- To delete an existing schedule select it in the schedule list and click on “Delete Schedule”
- The schedule will disappear
- To delete all the schedules click on the “Delete All Schedules” button
- To link a movie listed in the POS file to a specific Show Playlist click on the “Edit Links” button - see Figure 10The following window will appear:

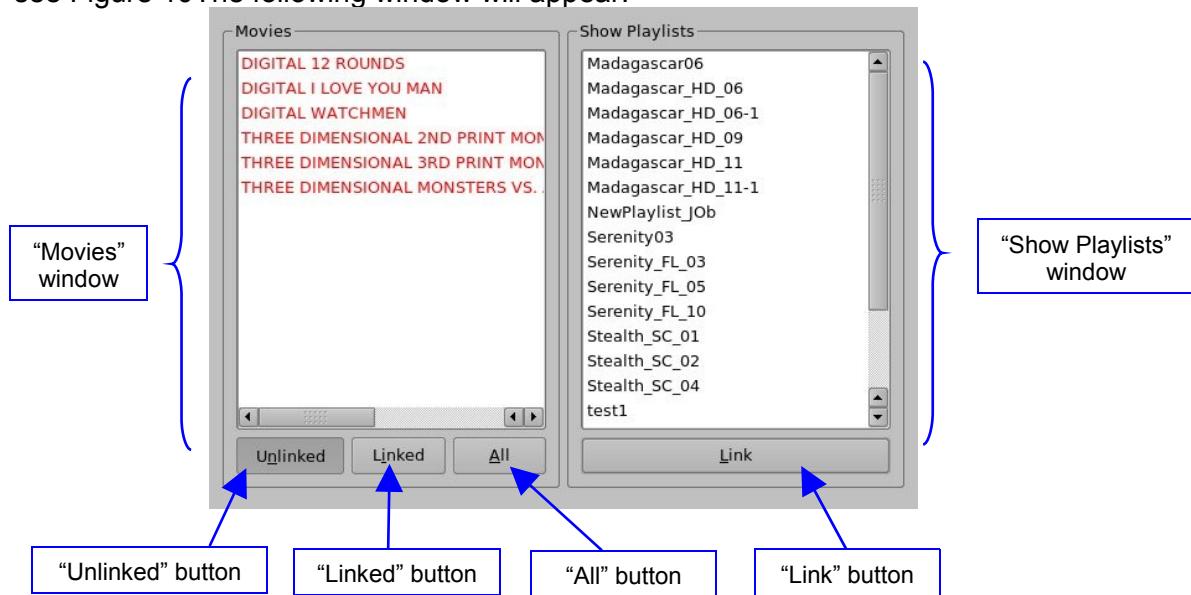


Figure 10: “Edit Links” Window – “Unlinked” View

The left side provides the list of movies listed in the POS File . This largely depends on whether or not the Show Playlist is linked with the POS file.

- If the "Unlinked" button is clicked the "Movies" window will display the list of movies that are not linked to any Show Playlist
- Select one movie from the POS File and one from the Show Playlist and click on “Link”
- The Show Playlist will be linked to the movie title defined in the POS File

- The playback of the Show Playlist will be performed according to the schedule of the linked movies title defined in the POS File
- To view the movie titles already linked to Show Playlists click on “Linked” on the bottom of the “Edit Links” window
- The following window will be displayed:

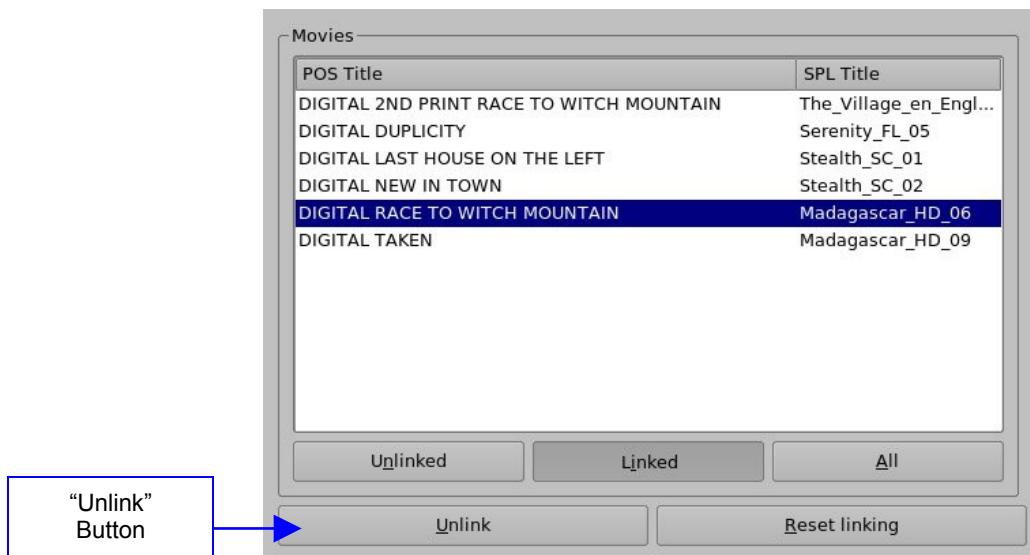


Figure 11: “Edit Links” Window – “Linked” View

- From this window select one title and unlink it by clicking on the “Unlink” button (optional)
- To view the whole list of movie titles listed in the POS file whether they are on linked or unlinked status click on “All”
- The “Movies” window will reflect the whole movie list, indicating the movie titles that are unlinked in red, as presented below:

Movies	
POS Title	SPL Title
DIGITAL 12 ROUNDS	The_Village_en_Engl...
DIGITAL 2ND PRINT RACE TO WITCH MOUNTAIN	Serenity_FL_05
DIGITAL DUPLICITY	
DIGITAL I LOVE YOU MAN	
DIGITAL LAST HOUSE ON THE LEFT	Stealth_SC_01
DIGITAL NEW IN TOWN	Stealth_SC_02
DIGITAL RACE TO WITCH MOUNTAIN	Madagascar_HD_06
DIGITAL TAKEN	Madagascar_HD_09
DIGITAL WATCHMEN	
THREE DIMENSIONAL 2ND PRINT MONSTERS VS. ALIENS	
THREE DIMENSIONAL 3RD PRINT MONSTERS VS. ALIENS	
THREE DIMENSIONAL MONSTERS VS. ALIENS	

Figure 12: “Edit Links” Window – “All” View

4.3 KDM Overview Tab

- To enter the “KDM Overview” tab click on “KDM Overview” on the top of the GUI at any time during the TMS GUI usage
- The “KDM Overview” tab will display all the KDMs available on the network using a color code to indicate their validity.

Below are the color codes and their correspondences.

- A green line corresponds to a KDM valid for more than 48 hours
- A yellow line corresponds to a KDM valid for less than 48 hours
- A red line corresponds to a KDM that is not currently valid, but will be valid in the future

The figure below illustrates the "KDM Overview" tab:

"KDM Overview" tab

Screen	CPL	Starts	Ends
screen-05	The Village (French with Danish s...	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00
screen-04	The Village (French with Danish s...	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00
Screen-03	The Village (French with Danish s...	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00
screen-01	The Village (French with Danish s...	Sat May 09 2009, 23:00	Sat Jun 12 2010, 23:00
screen-05	The Village (English with Chinese ...	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00
screen-04	The Village (English with Chinese ...	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00
Screen-03	The Village (English with Chinese ...	Mon Mar 08 2010, 00:00	Wed Apr 07 2010, 23:00
Screen-03	The Village (English with Chinese ...	Mon Feb 08 2010, 00:00	Mon Feb 08 2010, 23:00
Screen-03	The Village (English with Chinese ...	Fri Jan 08 2010, 00:00	Sat Feb 06 2010, 23:00
Screen-03	The Village (English with Chinese ...	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00
screen-01	The Village (English with Chinese ...	Sat May 09 2009, 23:00	Sat Jun 12 2010, 23:00
screen-09	Stealth 4K, 5.1 EN	Sat May 09 2009, 23:00	Sat Jun 12 2010, 23:00
screen-05	Stealth 4K, 5.1 EN	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00
screen-04	Stealth 4K, 5.1 EN	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00
Screen-03	Stealth 4K, 5.1 EN	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00
screen-09	Serenity Full Movie with Sp. Subtit...	Sat May 09 2009, 23:00	Sat Jun 12 2010, 23:00
screen-05	Serenity Full Movie with Sp. Subtit...	Sat May 09 2009, 23:00	Sun Sep 19 2010, 23:00
screen-04	Serenity Full Movie with Sp. Subtit...	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00
screen-04	Serenity Full Movie with Sp. Subtit...	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00
Screen-03	Serenity Full Movie with Sp. Subtit...	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00
screen-05	Madagascar	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00
screen-04	Madagascar	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00
screen-04	Madagascar	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00
Screen-03	Madagascar	Wed Aug 19 2009, 23:00	Sun Sep 19 2010, 23:00

Delete KDM(s) Delete Expired KDMs

LMS Disk Usage: 3830 GB of 9303 GB | Monday February 08 2010, 10:18:30 AM

Figure 13: KDM Overview Tab

The first column indicates on which screen the KDM can be used, and the next columns indicate the Content Title of the corresponding Composition Playlist. It also indicates the start and end dates of the KDM validity window.

- The following color significance is available by clicking the legend button

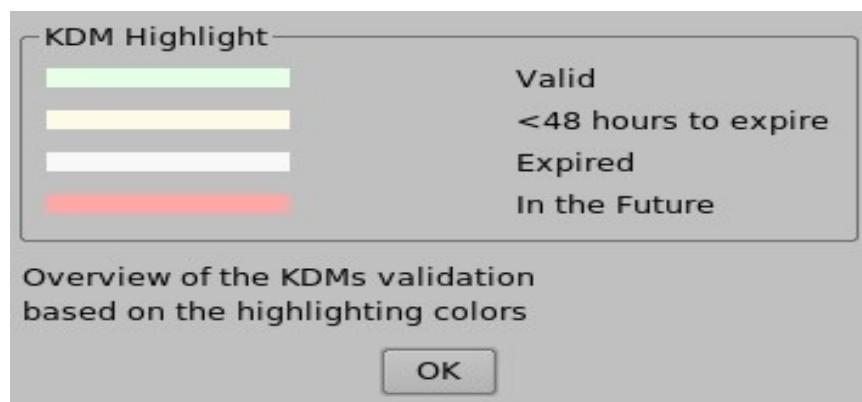


Figure 14: KDM HighlightTab

- To delete a KDM select it in the KDM list and click the "Delete KDM" button
- To delete all expired KDMs click the "Delete Expired KDM" button

The “KDMs Upload” (above image) button allows for ingestion of KDM from TMS (USB or local directory). Use the “Browse” button to select the folder from which to ingest KDM(s).

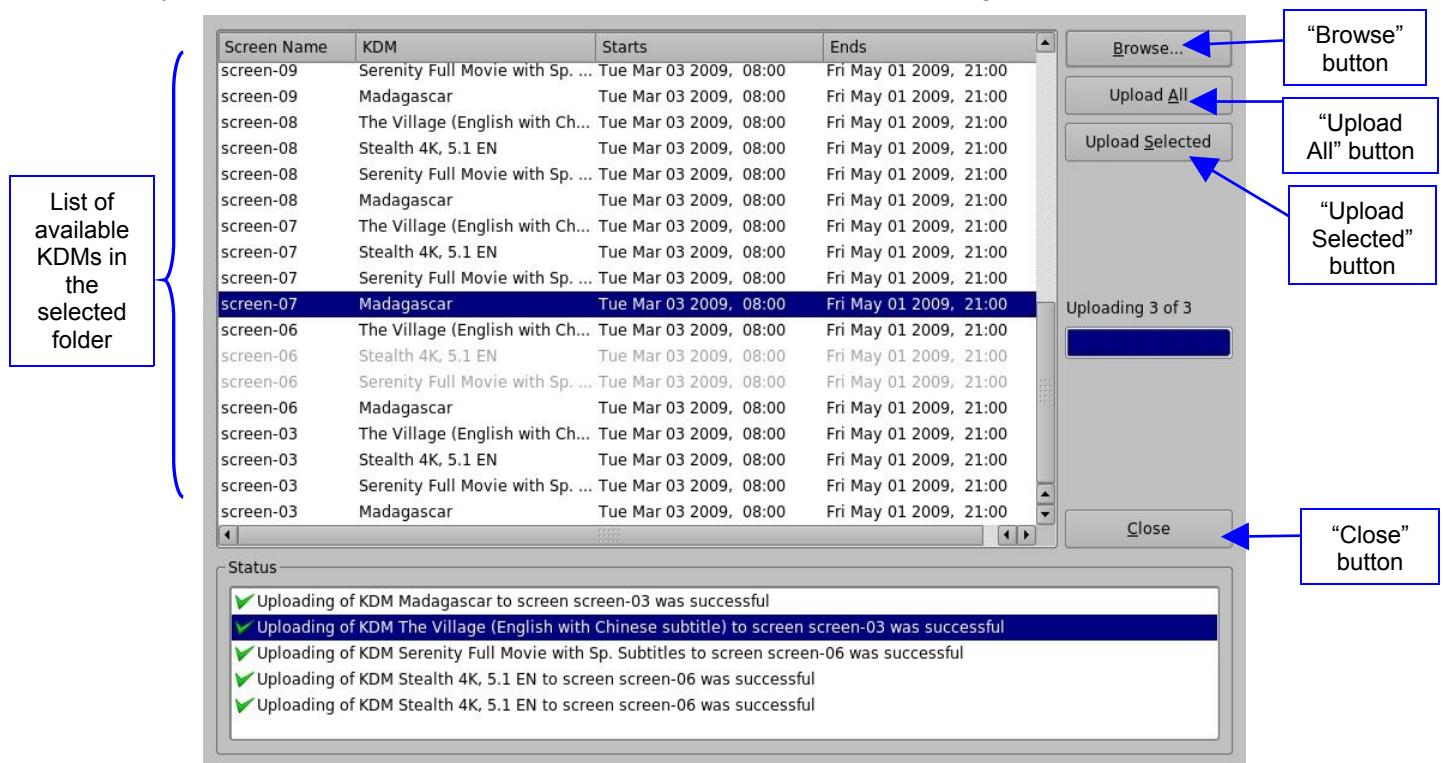


Figure 15: “KDMs Upload” Window

- To upload one or more KDM(s) select it (or select them) and click the “Upload Selected” button
- To upload all KDMs click the “Upload All” button
- Click the “Close” button to close the “KDMs Upload” Window

Note: Right clicking on an “Uploading of KDM ...” line – bottom part of the tab – will show a menu to clear the status logs or delete the selected message. Right clicking on “Uploading of KDM” is illustrated below:

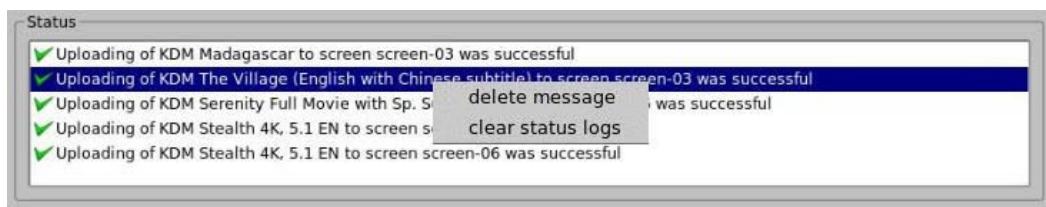


Figure 16: “KDMs Upload” Window – “Right Click Menu”

4.4 Show Playlist Builder Tab

4.4.1 Tab Overview

- To enter the "Show Playlist Builder" tab click on "Show Playlist Builder" at any time during the TMS GUI usage

The "Show Playlist Builder" tab contains:

- A left part containing all the Digital Cinema Packages (DCP) that were found on the LMS (features, trailers, and advertisements). They are together with the available automation cues and trigger cues. The "Show the Whole Multiplex" feature will show all the available DCPs found on one or more screens. All content that is shown exists in bold font on the LMS and on multiple screens. Content with a fine line does not exist on the LMS.
- A right part used to display the content of a given Show Playlist, that is already created or existing. Show playlist is described in the next step.

Note: Content type is differentiated by color and font. Pointing to a certain content will make an informative tool-tip showing the format and location available. The illustration below shows the "Show Playlist builder" tab.

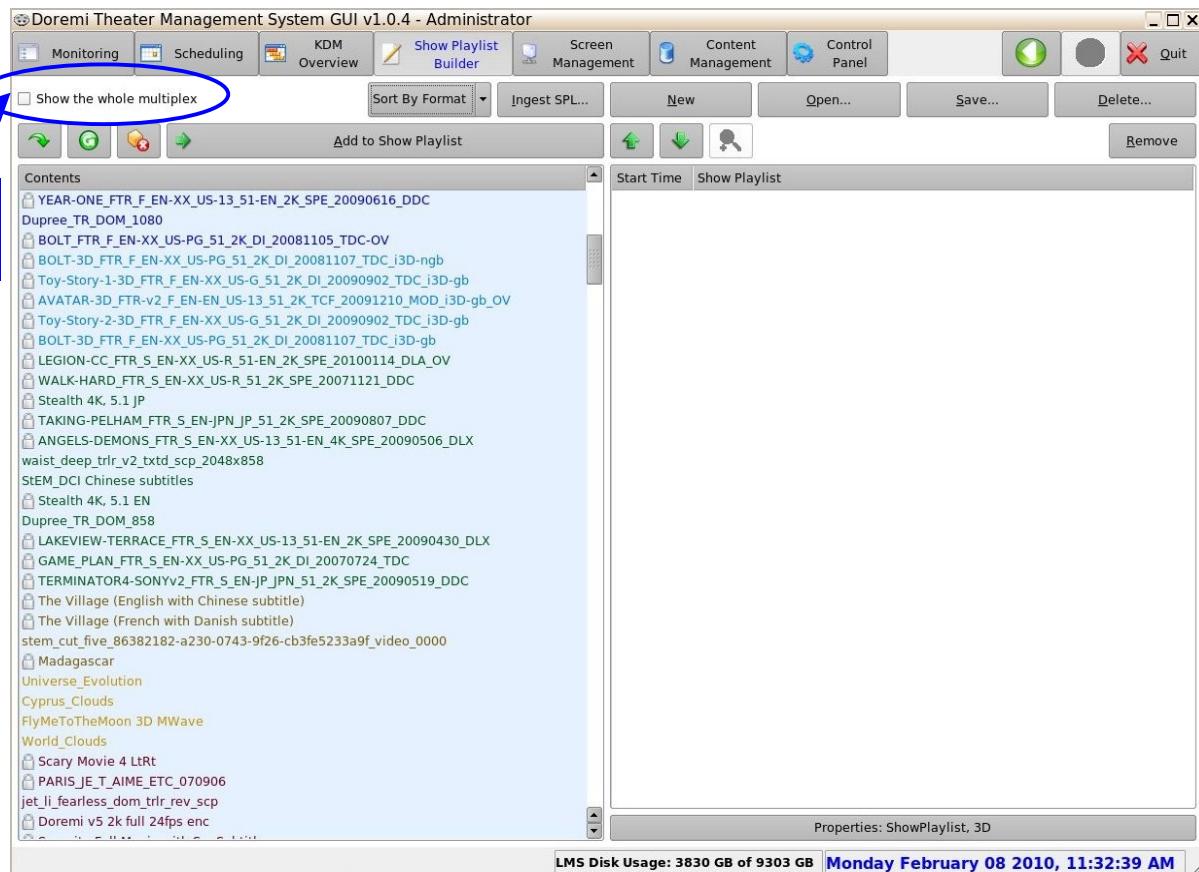


Figure 17: "Show Playlist Builder" Tab

4.4.2 Show Playlist Creation

A Show Playlist defines a succession of DCPs and Automation Cues. It provides the events chain to be taken into account for the playback of a show. A Show Playlist can be newly created or an existing Show Playlist can be opened and edited. See paragraphs 4.4.2.7 New Show Playlist and 4.4.3 Show Playlist Opening .

4.4.2.1 Principle

The “Show Playlist Builder” tab allows the users to create their own Show Playlist from the elements listed in the “Contents” window.

- To add an element to the Show Playlist select it
- The element will be reverse highlighted
- Click on the “Add to Show Playlist” button

This element will appear on the right part of the tab. Repeating this operation with all the required elements will lead to a Show Playlist, as presented below:

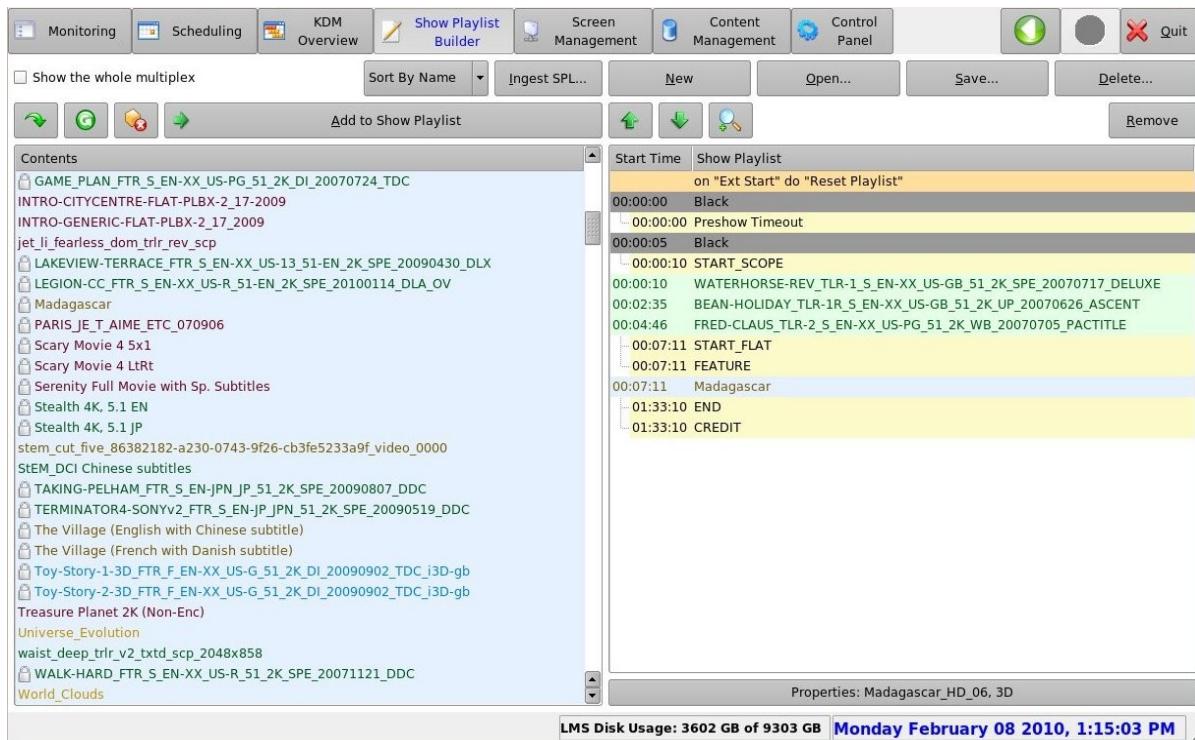


Figure 18: Show Playlist Creation

- If an element needs to be removed from the Show Playlist, select it in the “Show Playlist” window and click on “Remove”

The “Ingest SPL...” button – see figure above - forces the SPL ingest on a selected screen right away.

The SPL ingest window that will appear is presented below:

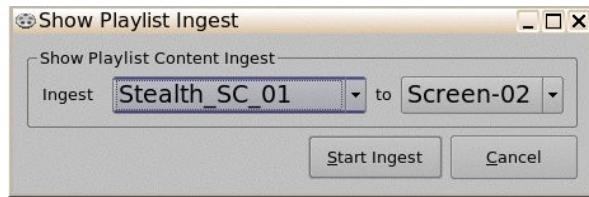


Figure 19: Show Playlist Ingest Window

- Select the SPL to ingest and the destination screen then click on the "Start Ingest" button
- Clicking on the "SPL Properties" button will make the "SPL Properties" window visible

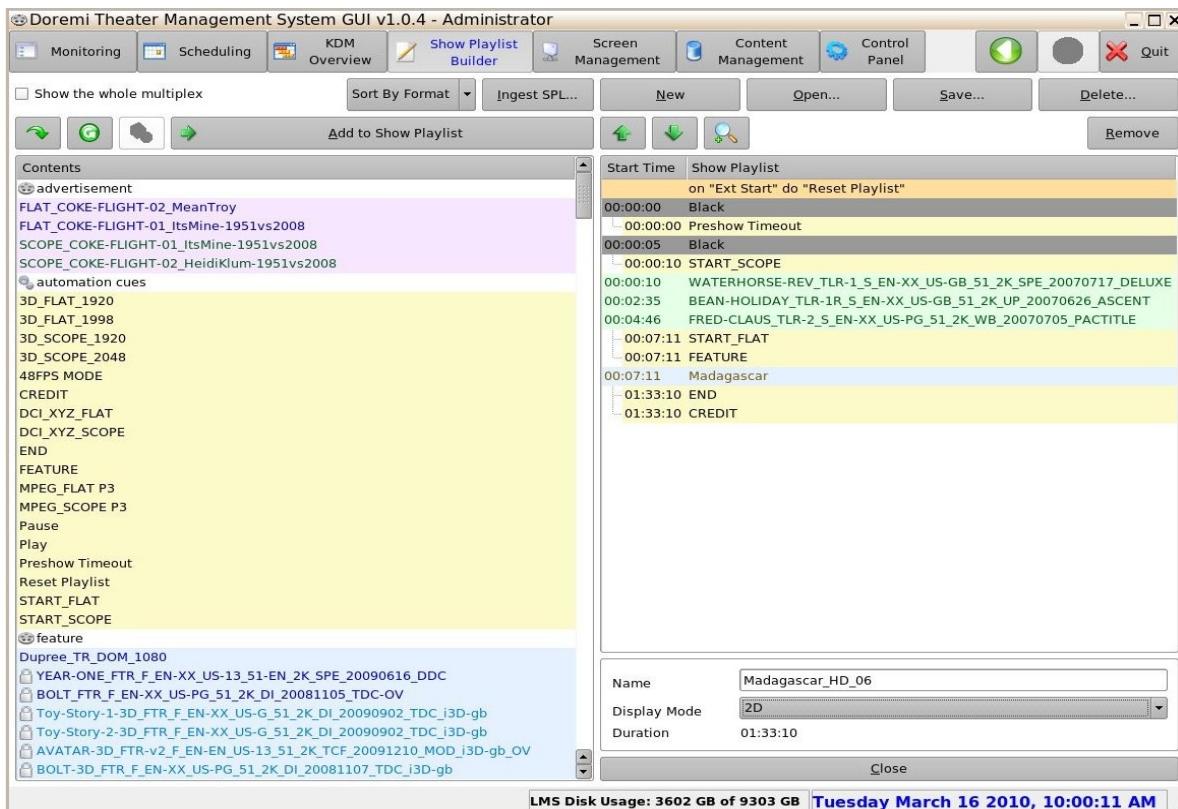


Figure 20: SPL Properties Window

- If necessary change the name of the SPL and set to "3D" SPL or "2D" SPL using the "Display Mode" list box
 - The default setting is "2D" SPL

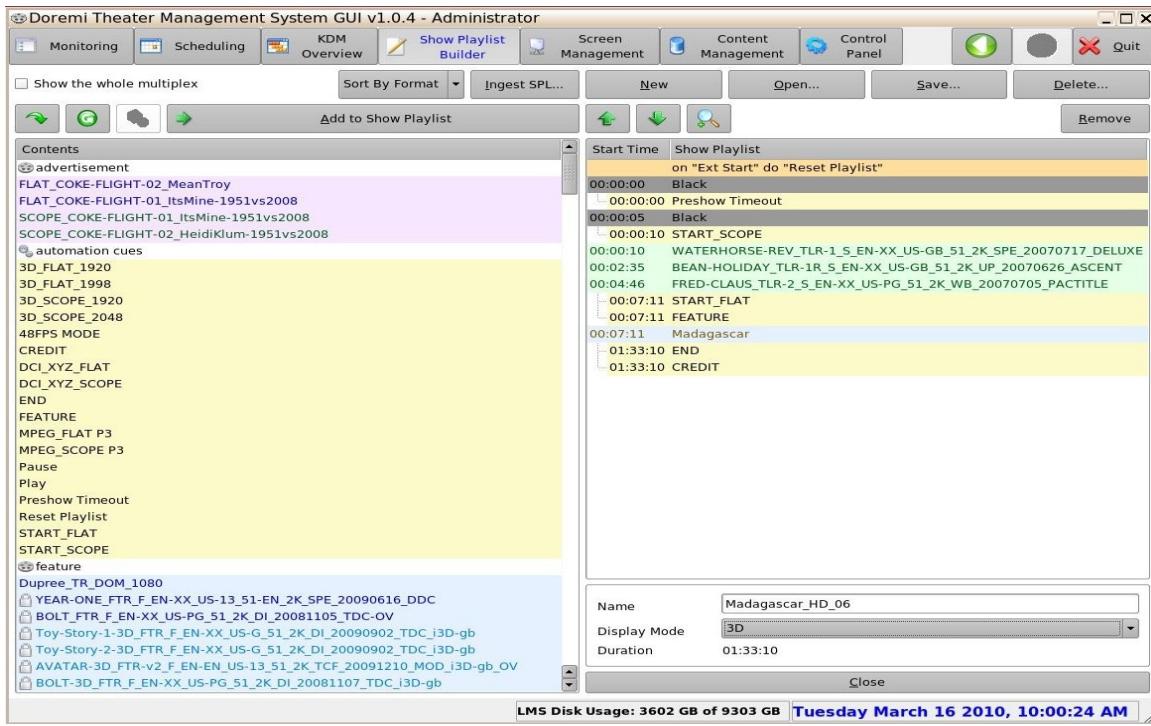


Figure 21: SPL Name and Display Mode Settings

- To hide the SPL Properties window click on the "Close" button
- Click the "Save" button located on the top of the tab to record the SPL settings
 - Otherwise, if not saved, the SPL settings will be ignored next time

4.4.2.2 Element Types

Different types of elements are available:

- Audio - visual content (feature, test content, trailer, rating, and black)
- Automation cues (Macro Automation cues from generation based on the Macro Editor application)
- Trigger cues which are based on the generation of the Macro Editor application

4.4.2.2.1 Audio - Visual Content

When audio-visual content is encrypted, a lock icon is displayed at the beginning of its line. It means that a corresponding KDM will be required to play content. See illustration below:

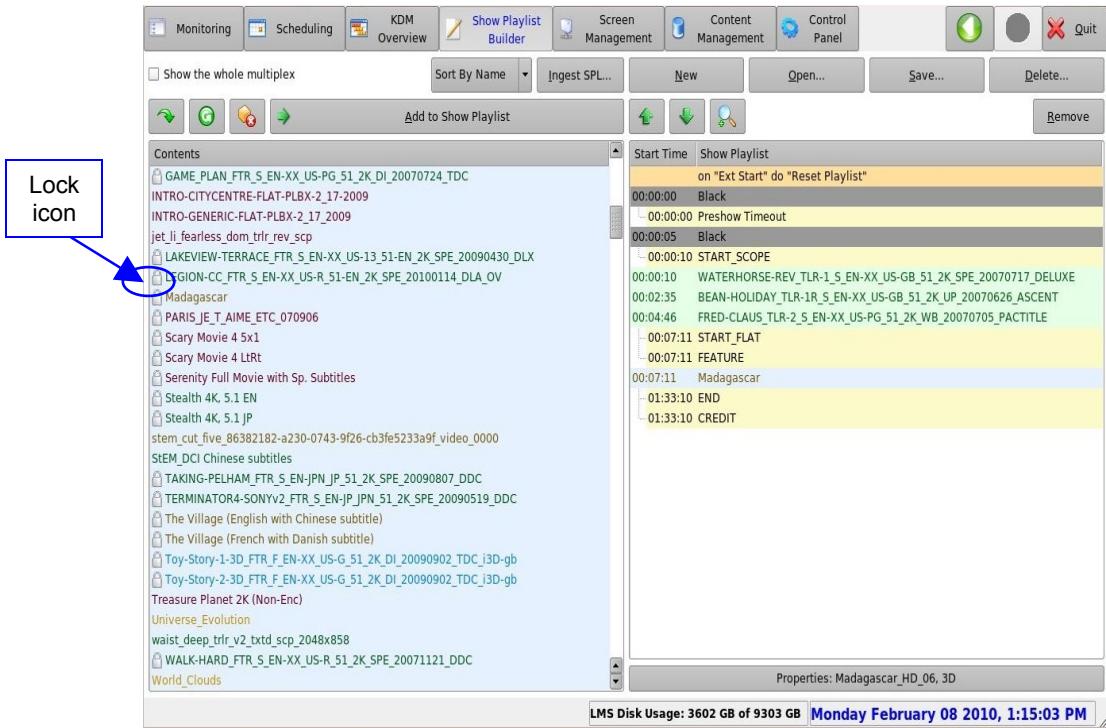


Figure 22: Encrypted Content Tag

4.4.2.2.2 Automation Cues

Macro Automation Cues can be added to an element of the Show Playlist.

- Select the element in the right part of the tab
- Select the desired Automation Cue on the left part of the tab
- Click on “Add to Show Playlist” button

User will be asked to define the offset of this Automation Cue from the beginning or the end of the chosen element using the following window.

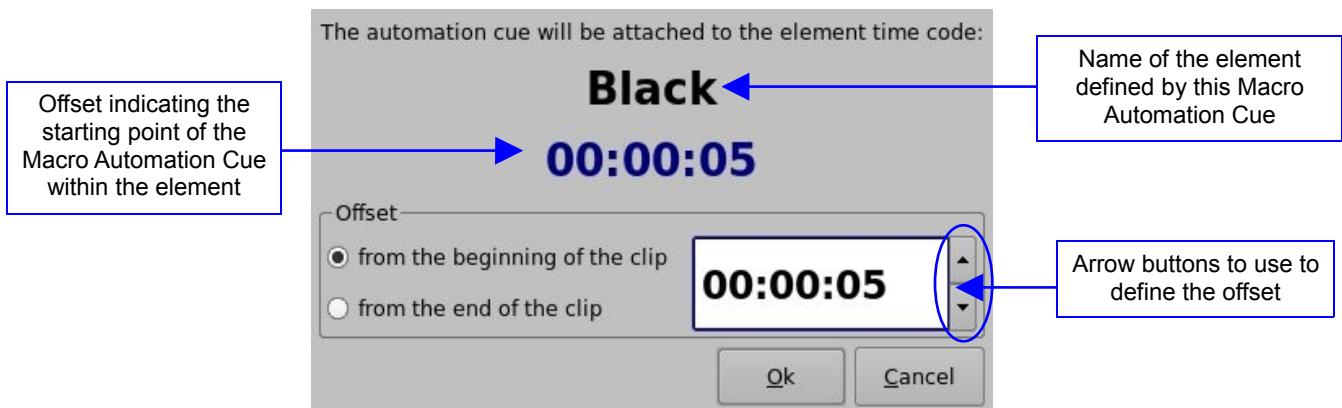


Figure 23: Automation Cue Offset Definition

- Click the "OK" button when finished

The Macro Automation Cue will appear under the element on the right part of the tab. The Macro Automation Cue is illustrated below:

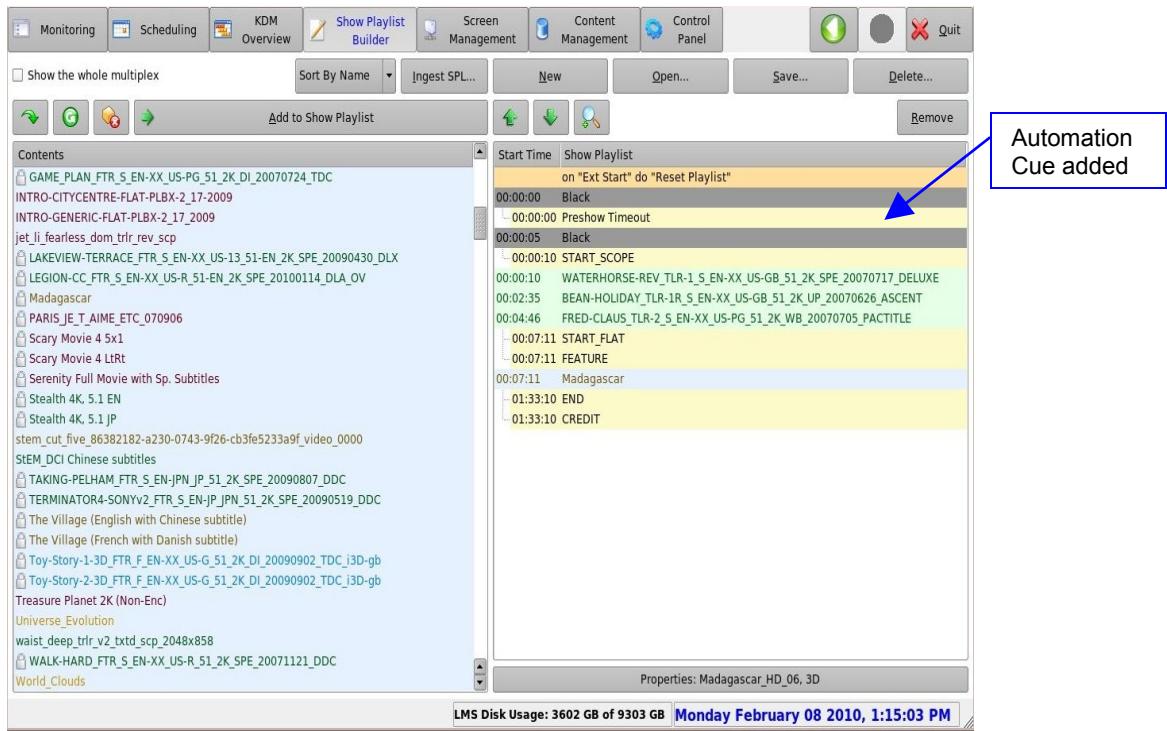


Figure 24: Automation Cue added to an Element

This operation is repeatable for the same element or for another element of the Show Playlist.

4.4.2.2.3 Trigger Cue

A Trigger Cue allows for the planning of the execution of Macro Automation Cues when the underlying condition happens.

For example, if a Trigger Cue is based on the condition “Wait for GPI #1 ON”, the user can link a specific Macro Automation Cue as presented above in order to execute such Macro when GPI #1 is asserted.

The user has the choice to program a Trigger Cue to be available during the whole Show Playlist, or only during a specific Show Playlist element.

To define a Trigger Cue for the whole Show Playlist:

- Select a Trigger Cue from the left side of the GUI

- Click on "Add to Show Playlist"
- The following window will appear:

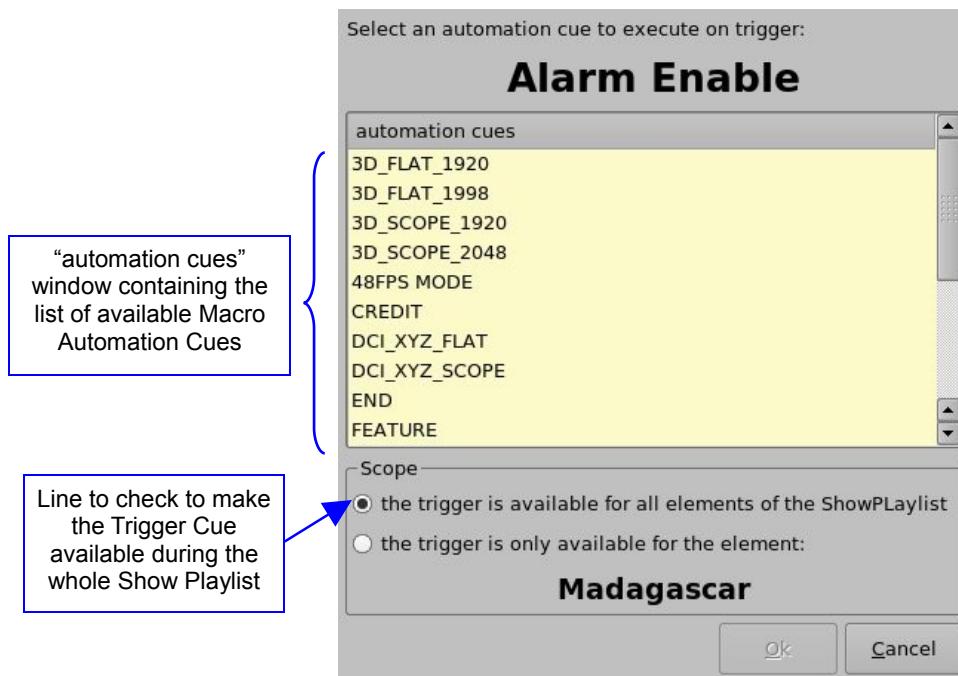


Figure 25: Trigger Cue Addition – Whole Show Playlist

- Select the Macro Automation Cue to associate with the Trigger Cue by clicking on the "automation cues" window
- The default scope for the Trigger Cue is "all the elements of the Show Playlist"
- Click the "OK" button

Creating a Trigger cue for only one element of the Show Playlist involves the following:

- Select the element on the Show Playlist on the GUI
- Select the Trigger Cue and add it to the left window of the GUI
- Then click on "Add to Show Playlist"
- The same window as in Figure 25 will be displayed

Associate a Macro Automation Cue using the same process described above (Figure 26).

- Check the line "the trigger is only available for the element"
- The line below contains the name of the element that was selected (Figure 26)

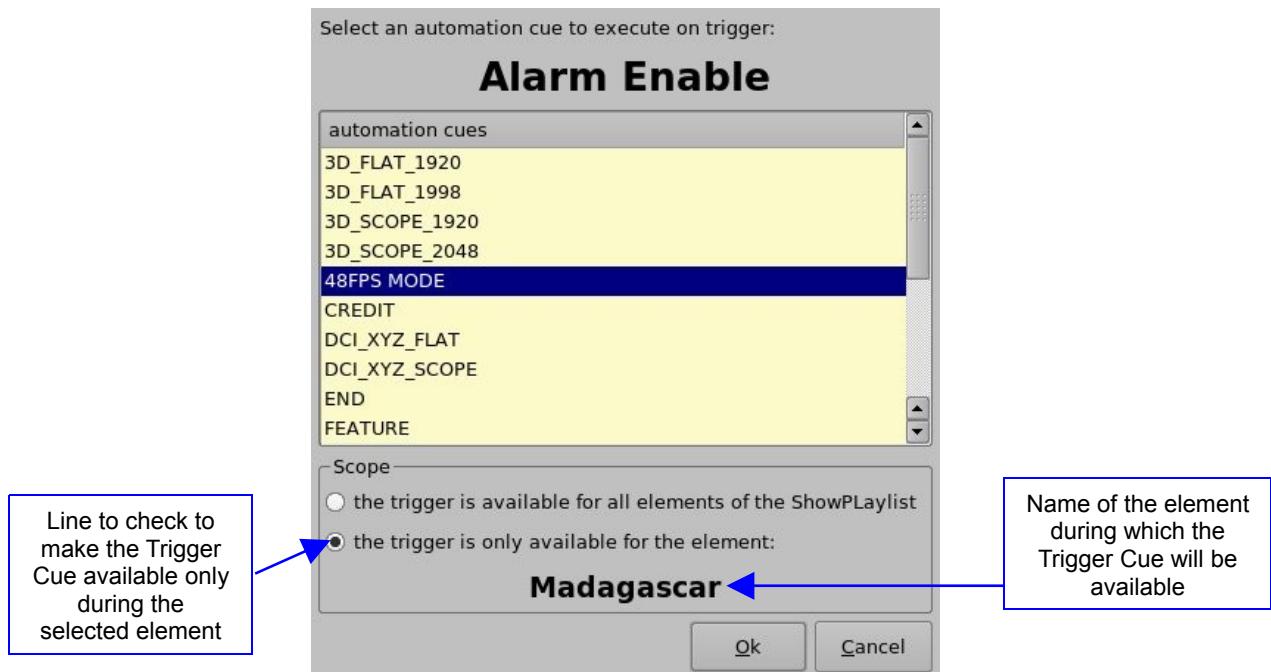


Figure 26: Trigger Cue Addition – Single Element

4.4.2.3 Elements Recording

The two arrows allow the user to change the order of the elements in the Show Playlist. See illustrations below:



Figure 27: Arrow Pointing to the Top



Figure 28: Arrow Pointing to the Bottom

Using these arrows allows each element to be moved to the top or to the bottom of the Show Playlist (see Figure 24).

- To move an element to the top select it and click on the arrow pointing to the top
- To move an element to the bottom select it and click on the arrow pointing down

Repeat these steps until the correct order of the elements is obtained

4.4.2.4 Refresh Buttons

Two "Refresh" buttons are available in this tab, as illustrated in Figure 30.

- The "Refresh Contents List" button will do a quick refresh without rescanning the content.
- The "Refresh Ingest Servers" button is used to synchronize the contents view with the content on the ingest server(s). This is necessary to show the newly transferred content on the LMS/ingest servers(s). When clicking on this button, the following screen will appear:

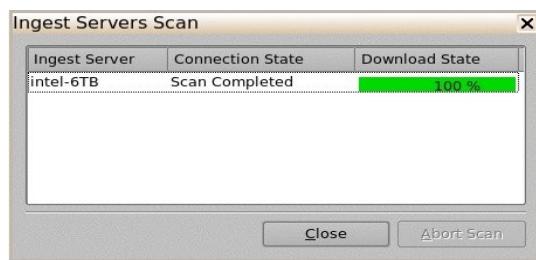


Figure 29: Ingest Servers Scan Window

- When scan is complete, click the "close" button.

4.4.2.5 Properties Button

The user can view the properties of the elements of the Show Playlist by selecting one of the elements, which is located on the right part of the window and clicking the "Properties" button as illustrated in Figure 30. Properties of the Automation events can also be edited using this button.

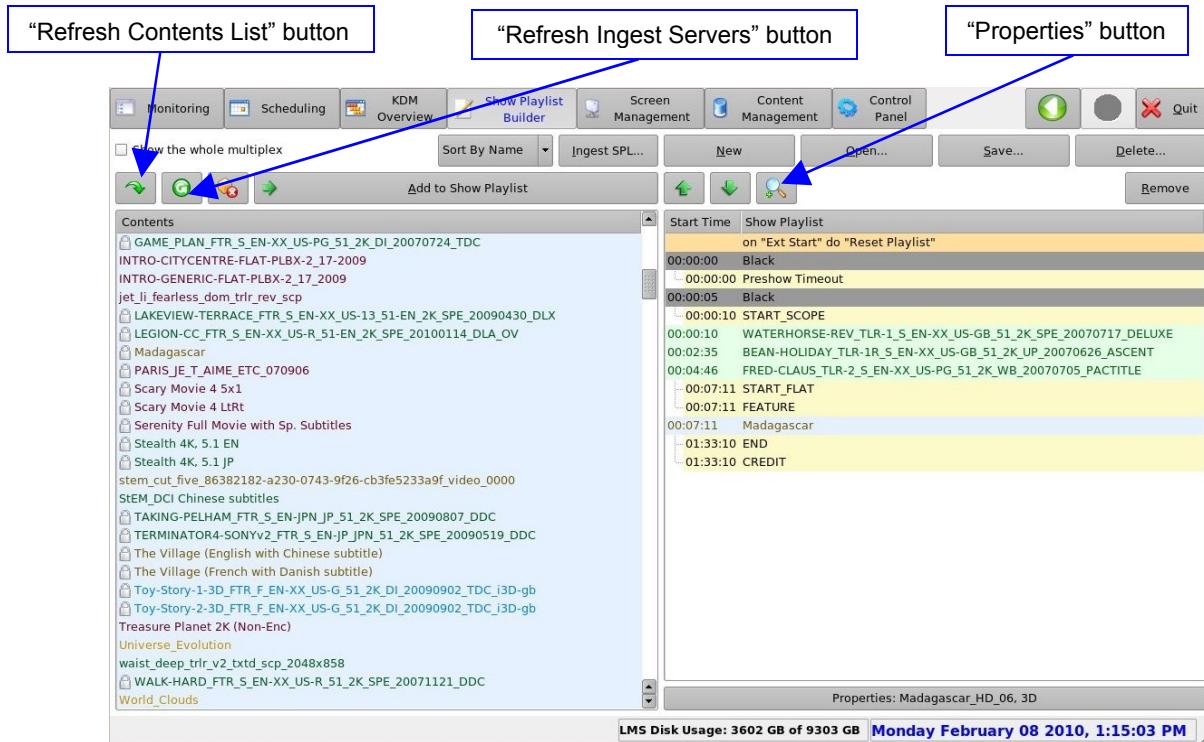


Figure 30: Refresh and Properties Buttons

In case of a Trigger Cue or an Automation Cue the user will be able to edit the properties that were asked for when the element was added to the Show Playlist.

In case of an audio-visual element a window listing the characteristics of this element will be displayed (see Figure 31 below).

UUID	6b319755-007d-3240-b2c0-ec2dbaacffd2																																																							
Content Title	Madagascar																																																							
Content Kind	feature																																																							
Duration	01:25:59																																																							
Picture																																																								
Encoding	MPG2 (1920 x 1080)																																																							
Rate	24 1																																																							
Sound																																																								
Channels	6																																																							
Quantization	24 bits																																																							
KDM available																																																								
<table border="1"> <thead> <tr><th>Screen</th><th>Begin</th><th>End</th><th>Status</th><th>UUID</th></tr> </thead> <tbody> <tr><td>screen-03</td><td>2009-03-02 08:00:01</td><td>2009-05-02 21:00:01</td><td>available</td><td>a510b039-d125-4af3-a68b-f377d996ae09</td></tr> <tr><td>screen-03</td><td>2009-03-03 08:00:01</td><td>2009-05-01 21:00:01</td><td>available</td><td>35f7859a-3af1-499e-89b2-36a44903f0b2</td></tr> <tr><td>screen-06</td><td>2009-03-02 08:00:01</td><td>2009-05-02 21:00:01</td><td>available</td><td>51b23007-edd7-4995-bfc3-50bad1d0f057</td></tr> <tr><td>screen-06</td><td>2009-03-03 08:00:01</td><td>2009-05-01 21:00:01</td><td>available</td><td>05bd46ee-e684-4ce0-982a-d1340cb30742</td></tr> <tr><td>screen-07</td><td>2009-03-02 08:00:01</td><td>2009-05-02 21:00:01</td><td>available</td><td>856ab3c8-971f-435b-bb89-e0ed5341fb72</td></tr> <tr><td>screen-07</td><td>2009-03-03 08:00:01</td><td>2009-05-01 21:00:01</td><td>available</td><td>9af8fd7f-f238-45f9-ace4-d5b59aec02db</td></tr> <tr><td>screen-08</td><td>2009-03-02 08:00:01</td><td>2009-05-02 21:00:01</td><td>available</td><td>4e13a50b-8f15-4b7a-a4a4-10fce6b0dc9</td></tr> <tr><td>screen-08</td><td>2009-03-03 08:00:01</td><td>2009-05-01 21:00:01</td><td>available</td><td>8ea6db29-3198-44a2-9cd5-542ef252c479</td></tr> <tr><td>screen-09</td><td>2009-03-02 08:00:01</td><td>2009-05-02 21:00:01</td><td>available</td><td>65ca0cc8-7977-4e33-a76c-602df6bdc4d4</td></tr> <tr><td>screen-09</td><td>2009-03-03 08:00:01</td><td>2009-05-01 21:00:01</td><td>available</td><td>3430f438-67a0-4304-846d-c51labfb3c0c</td></tr> </tbody> </table>		Screen	Begin	End	Status	UUID	screen-03	2009-03-02 08:00:01	2009-05-02 21:00:01	available	a510b039-d125-4af3-a68b-f377d996ae09	screen-03	2009-03-03 08:00:01	2009-05-01 21:00:01	available	35f7859a-3af1-499e-89b2-36a44903f0b2	screen-06	2009-03-02 08:00:01	2009-05-02 21:00:01	available	51b23007-edd7-4995-bfc3-50bad1d0f057	screen-06	2009-03-03 08:00:01	2009-05-01 21:00:01	available	05bd46ee-e684-4ce0-982a-d1340cb30742	screen-07	2009-03-02 08:00:01	2009-05-02 21:00:01	available	856ab3c8-971f-435b-bb89-e0ed5341fb72	screen-07	2009-03-03 08:00:01	2009-05-01 21:00:01	available	9af8fd7f-f238-45f9-ace4-d5b59aec02db	screen-08	2009-03-02 08:00:01	2009-05-02 21:00:01	available	4e13a50b-8f15-4b7a-a4a4-10fce6b0dc9	screen-08	2009-03-03 08:00:01	2009-05-01 21:00:01	available	8ea6db29-3198-44a2-9cd5-542ef252c479	screen-09	2009-03-02 08:00:01	2009-05-02 21:00:01	available	65ca0cc8-7977-4e33-a76c-602df6bdc4d4	screen-09	2009-03-03 08:00:01	2009-05-01 21:00:01	available	3430f438-67a0-4304-846d-c51labfb3c0c
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screen-06	2009-03-02 08:00:01	2009-05-02 21:00:01	available	51b23007-edd7-4995-bfc3-50bad1d0f057																																																				
screen-06	2009-03-03 08:00:01	2009-05-01 21:00:01	available	05bd46ee-e684-4ce0-982a-d1340cb30742																																																				
screen-07	2009-03-02 08:00:01	2009-05-02 21:00:01	available	856ab3c8-971f-435b-bb89-e0ed5341fb72																																																				
screen-07	2009-03-03 08:00:01	2009-05-01 21:00:01	available	9af8fd7f-f238-45f9-ace4-d5b59aec02db																																																				
screen-08	2009-03-02 08:00:01	2009-05-02 21:00:01	available	4e13a50b-8f15-4b7a-a4a4-10fce6b0dc9																																																				
screen-08	2009-03-03 08:00:01	2009-05-01 21:00:01	available	8ea6db29-3198-44a2-9cd5-542ef252c479																																																				
screen-09	2009-03-02 08:00:01	2009-05-02 21:00:01	available	65ca0cc8-7977-4e33-a76c-602df6bdc4d4																																																				
screen-09	2009-03-03 08:00:01	2009-05-01 21:00:01	available	3430f438-67a0-4304-846d-c51labfb3c0c																																																				
Ok																																																								

Figure 31: Example of Information Related to Audio-Visual Content

Note: Some of the content (Encoding, Channels, and Quantization) will not be available if the content is not present on any of the screen servers.

4.4.2.6 Show Playlist Saving

When Show Playlist has been created according to the procedure presented above, it can be saved using the "Save" button assuming that the user is logged in as "Admin" or "Manager" (Section 4.7 Control Panel Tab). Click the "Save" button to save the Show Playlist. See illustration below for more details.

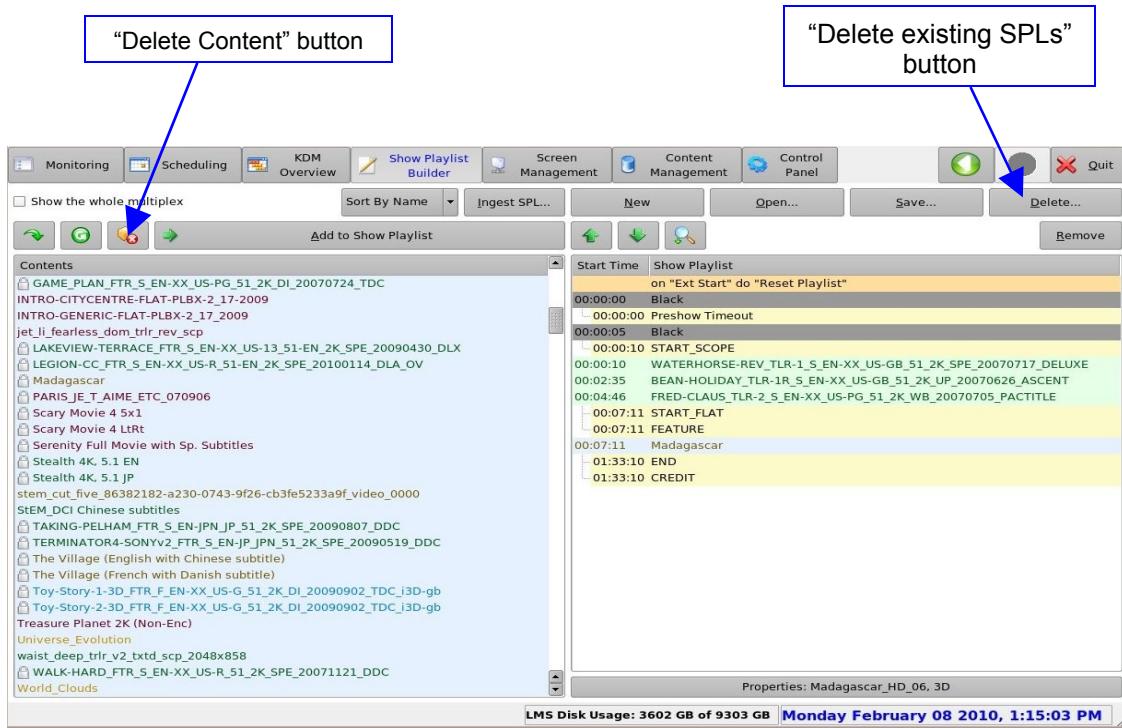


Figure 32: Show Playlist Saving

4.4.2.7 New Show Playlist

- If a new playlist needs to be created click on the "New" button (see Figure 32 above)
 - It will remove the Show Playlist display on the right part of the user display

Note: Save the current Show Playlist before clicking on "New". Otherwise, it will be lost.

4.4.3 Show Playlist Opening

If a Show Playlist already exists, it can be opened using the "Open" button (see Figure 32 above). The Show Playlist will be displayed into the right part of the user interface as if it was created according to the procedure presented above.

4.4.4 Deletion Operations

To perform the deletion operations, the user needs to have "Manager" or "Admin" privileges.

- To delete content from the server select the content to delete from the left part of the window
- Click on the "Delete Content" button (see Figure 32 above)
- To delete existing Show Playlists, click on the "Delete existing SPLs" button (Figure 31)

- The following window will appear, allowing the user to select which Show Playlist(s) to delete

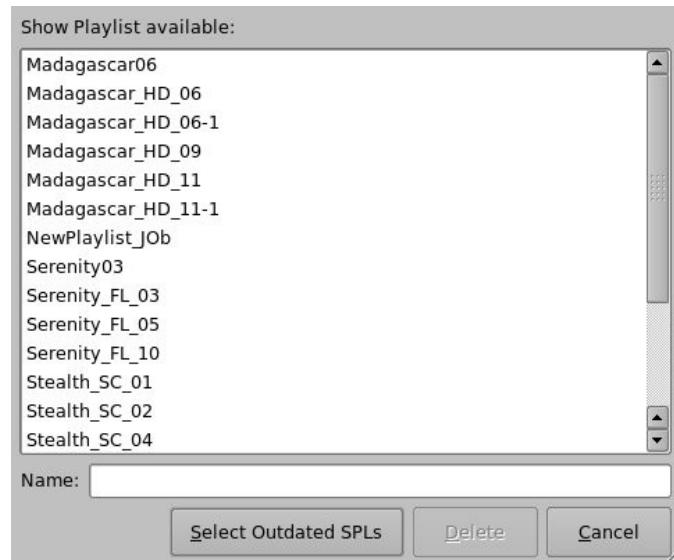


Figure 33: Delete SPL Window

- Select the Show Playlist(s) to delete by holding the "Ctrl" key on the keyboard. This function will allow users to select multiple SPLs. Or, click the "Select Outdated SPLs" button to select all SPLs that are not linked. The illustration below shows this function:



Figure 34: Delete SPL Window - SPLs Selected

- Click the "Delete" button to perform the deletion

4.5 Screen Management Tab

4.5.1 Tab Overview

- To enter the “Screen Management” tab click on “Screen Management” on the top of the GUI at any time during the TMS GUI usage

The “Screen Management” tab allows different functions depending on the logged in status. In case the user is logged in as “Manager” or as “Admin”, the tab will only allow the user to view the current Show Playlist playback, on a specific screen.

The screen number can be selected using the list-box available on the top of the tab as illustrated below:

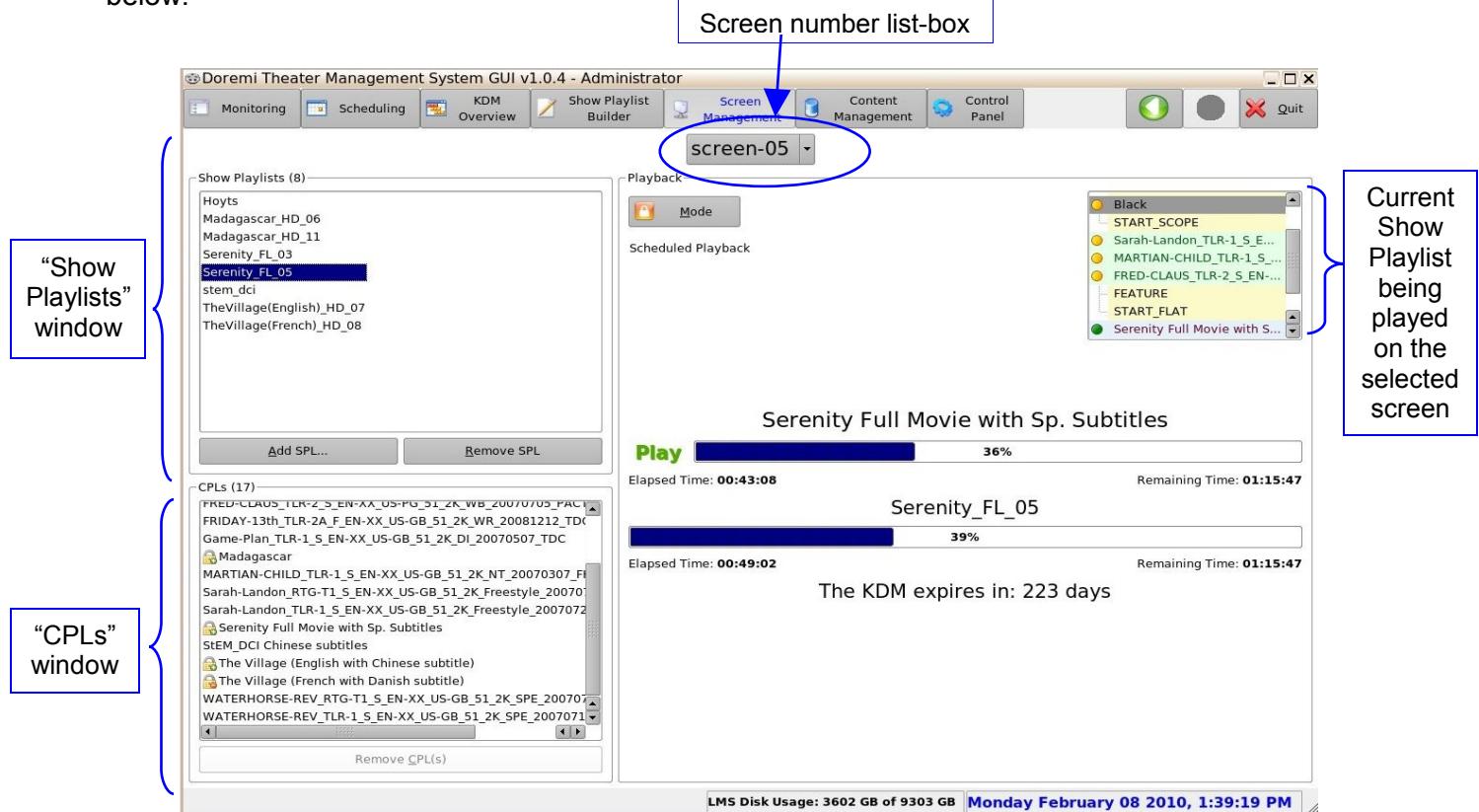


Figure 35: Screen Management Tab

The left part of this tab displays the Show Playlists and the Composition Playlists (CPLs). Both are available on the selected screen, in the “Show Playlists” window and in the “CPLs” window – see Figure 35 above.

The “Playback” window - right part of the window - contains the Show Playlist progress list-box. The list-box displays the current playback position within the Show Playlist using a green flag. The elements already “played” are flagged using a yellow mark whereas the elements that are not played for the moment do not have any flag at all (Figure 36).

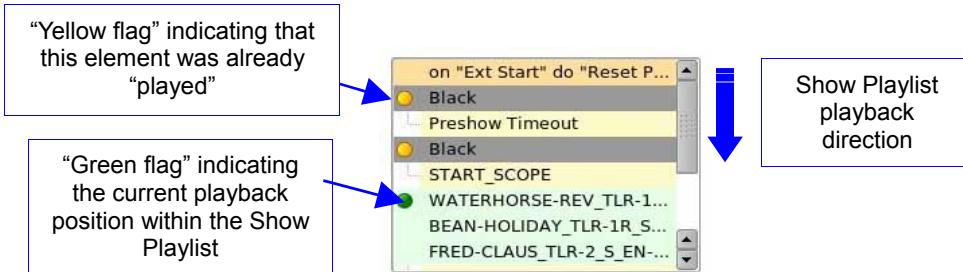


Figure 36: Show Playlist Progress List-box

4.5.2 Manager/Admin Usage

When logged in as "Manager" or "Admin", the user will be able to navigate within the Show Playlist (Section 4.7 Control Panel Tab). To navigate within the Show Playlist, the user must be in Pause mode (paragraph 4.5.2.1 Pause Mode). The user is able to load a Show Playlist and manage CPL/SPL (paragraphs 4.5.2.2 Show Playlist Loading and 4.5.2.3 CPL and SPL Management). See illustration below:

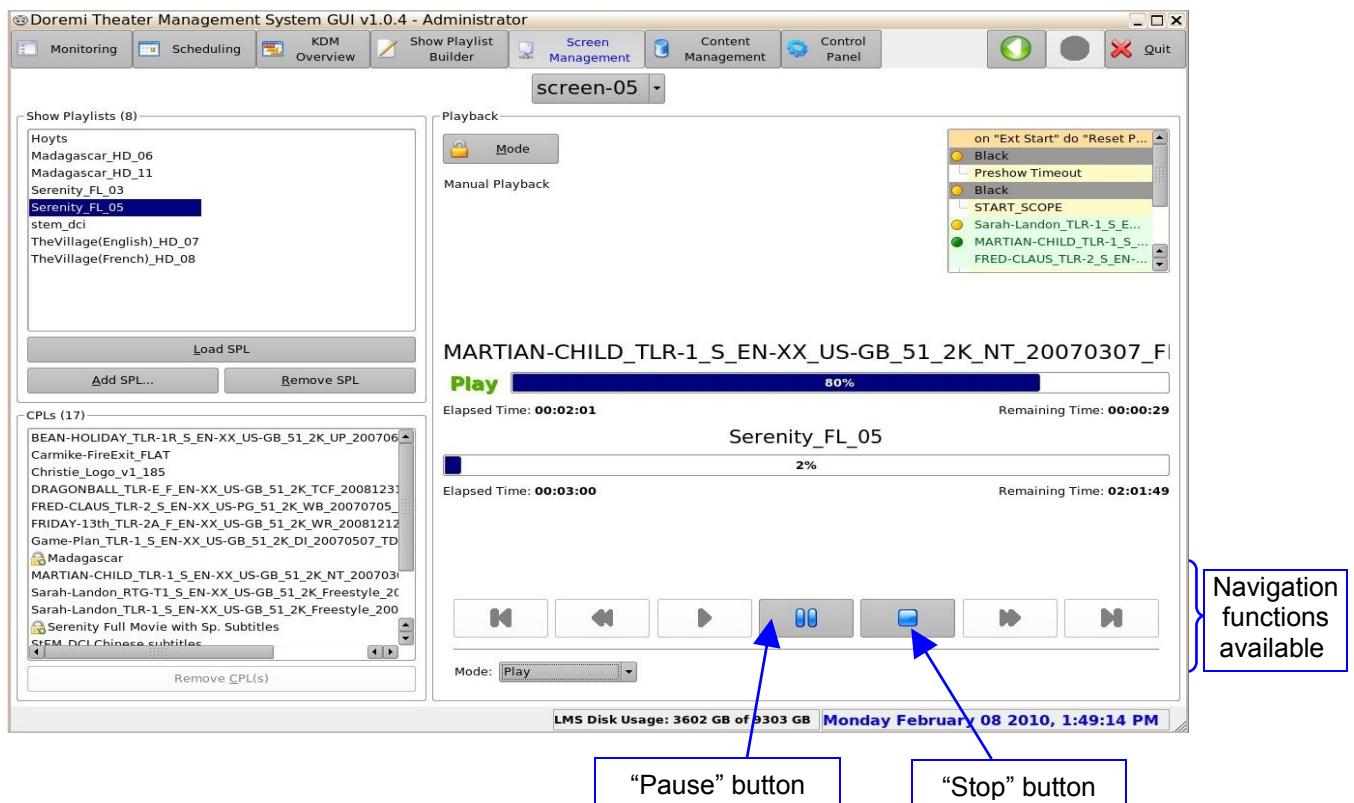


Figure 37: “Screen Management” Tab – Manager Usage

4.5.2.1 Pause Mode

To enter the Pause mode, click the “Pause” button. See Figure 37 above.

While being in Pause mode, the user can skip to the previous clip or to the next clip within the Show Playlist. The user can also directly go to three minutes after the pause location or go back to three minutes before the current pause location within the current clip. The buttons required, in order, to perform these operations, are presented on the Figure 38 below:

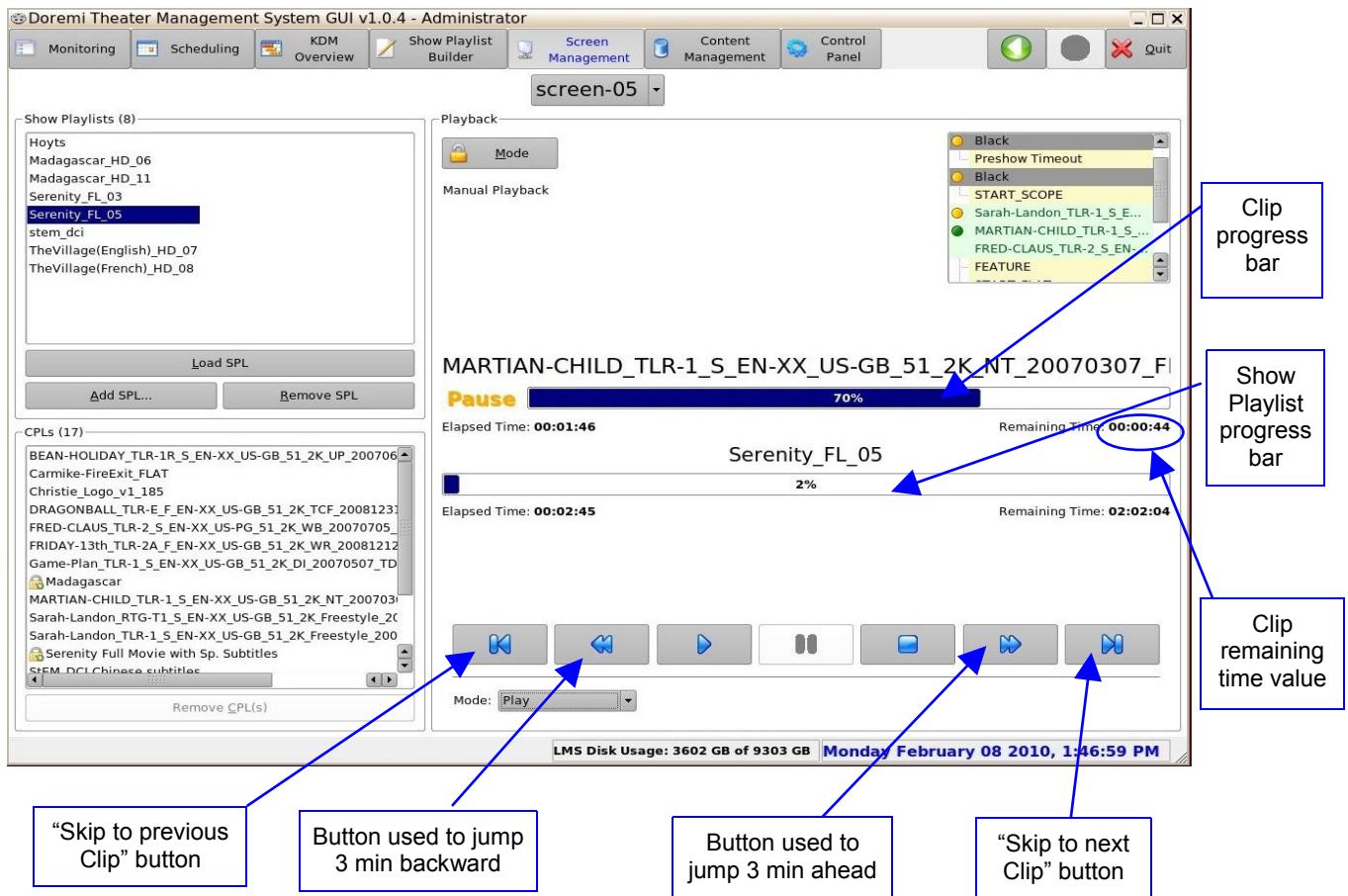


Figure 38: Preview Tab during Pause

Click the “Play” button in order to re-start the playback from the selected point. To set the “Loop” mode - meaning that the current playlist will be played in loop – select the Mode “Loop” in the list-box. While in Pause mode, the user can locate within the current clip by clicking on the "clip remaining time value" – see figure above. The following “Locate” window will appear:

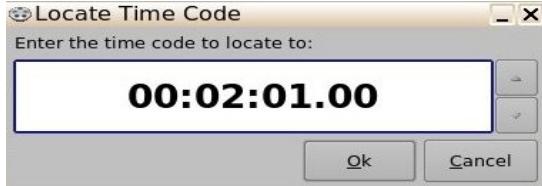


Figure 39: Locate Window

Enter the desired time-code value, or use the two arrows on the right, and click the “Ok” button. The user will now have jumped to the specified time-code within the current clip. See Figure 40 below:

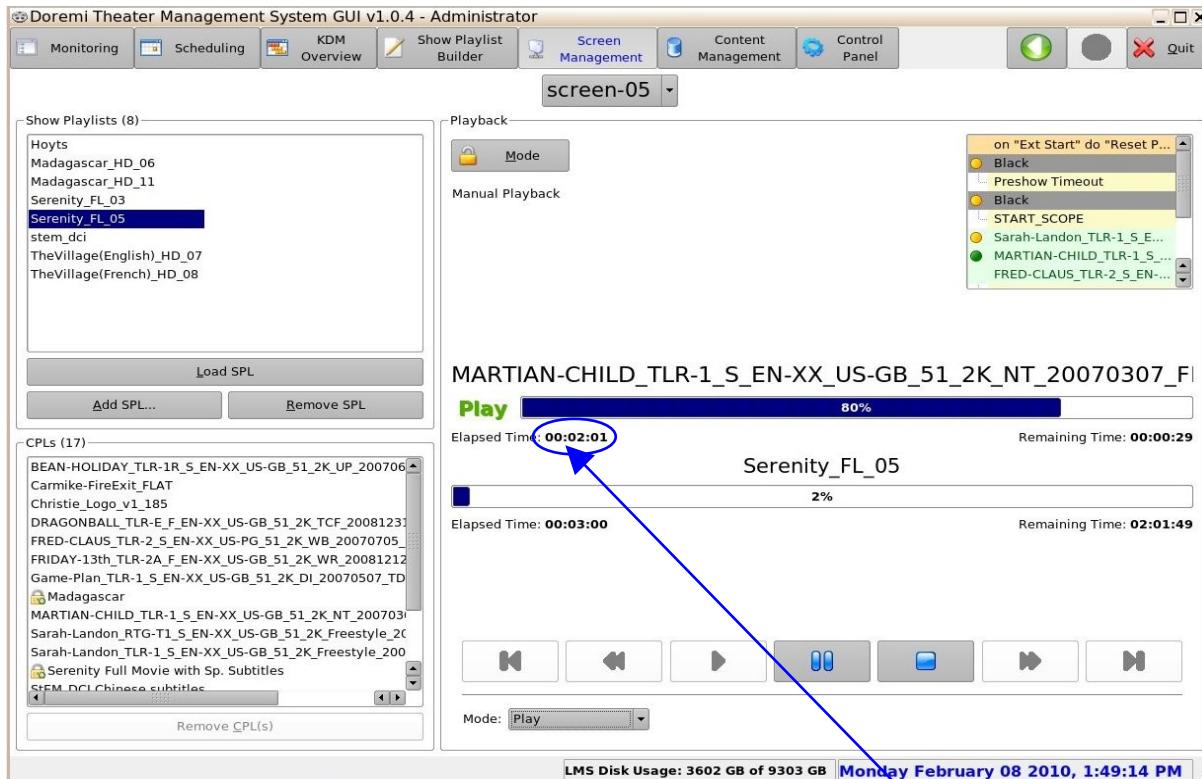


Figure 40: Locate Result

- To resume back to Playback, click the "Play" button.

4.5.2.2 Show Playlist Loading

The “Manager” or “Admin” privileges allow the user to stop the current Show Playlist. The same privileges also allow the user to load another Show Playlist from the “Show Playlists” window.

To load another available Show Playlist:

- Click the “Stop” or “Pause” button.

- Click on desired Show Playlist in the "Show Playlists" window.
- The content of the selected Show Playlist will be displayed in the "Show Playlist progress list-box". Click the "Play" button to start playback.

4.5.2.3 CPL and SPL Management

When logged in as "Admin" or "Manager", the user(s) will be able to add or delete a SPL and CPL. See Figure 41 below:

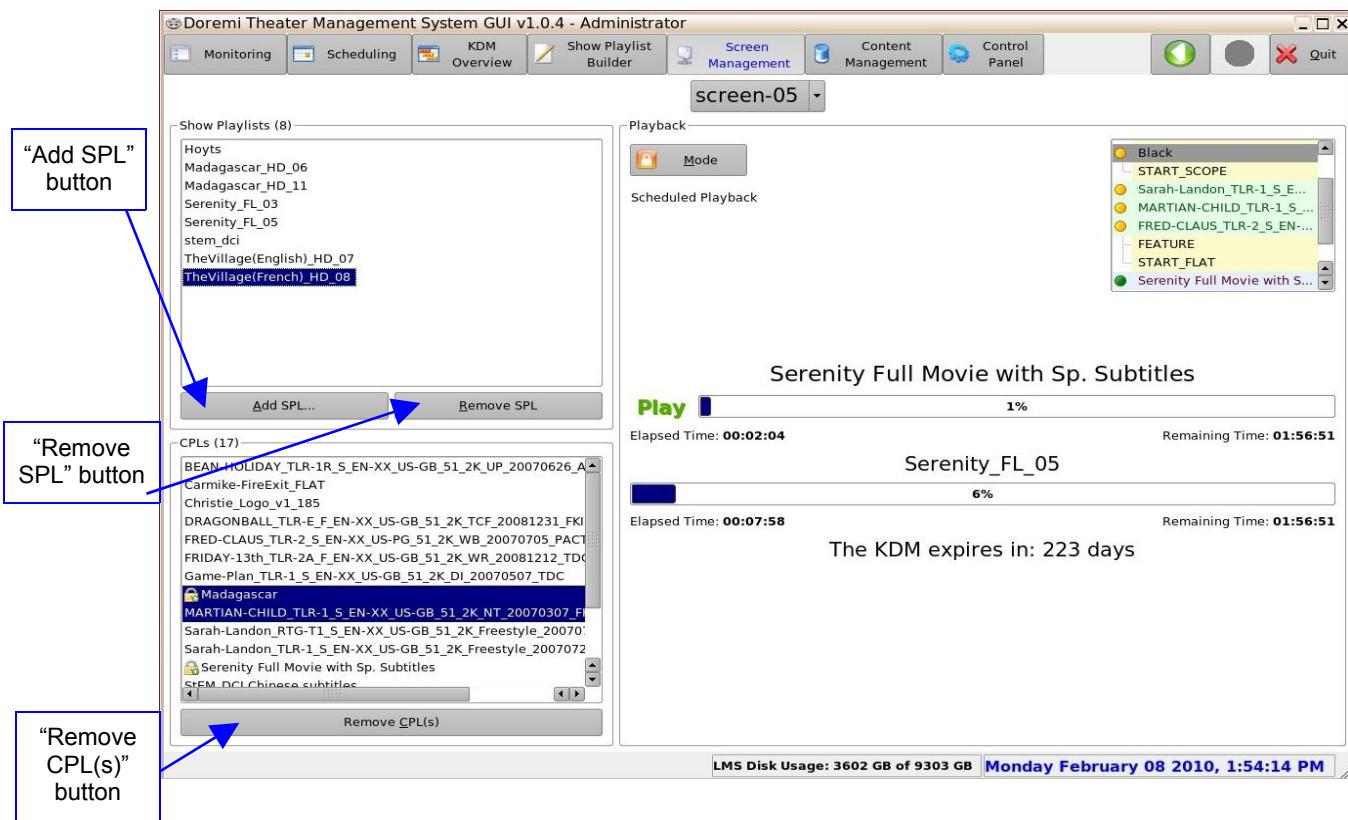


Figure 41: Screen Management Tab – Admin Usage

To remove a Composition Playlist (CPL):

- Selected the CPL from the "CPLs" window and click "Remove CPL".

To delete a "Show Playlist":

- Select the Show Playlist from the "Show Playlist" window and click the "Remove Show Playlist" button.

To add a "Show Playlist":

- Click the "Show Playlist" button.

The following screen will be displayed:

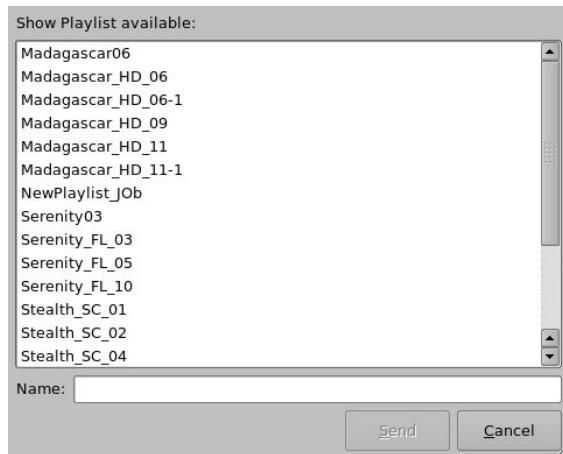


Figure 42: Window to Add a Show Playlist

Choose the required Show Playlist and click on "Send". The concerned Show Playlist will be added to the screen and the "Show Playlists" window will be updated accordingly. The presence of all the required assets will be checked and the missing assets will be ingested by the selected screen. The ingest process will be visible in the "Content Management" tab.

As "Admin" or "Manager", the user will be able to lock the Playback mode (Section 4.7.2 User Management) . To lock the Manual mode, click on the "Mode" button which is located above the "Manual Playback" tag on the top of the window. The "Schedule Playback" tab will appear, indicated the new Playback Mode.

The following "Screen Management" tab will appear:

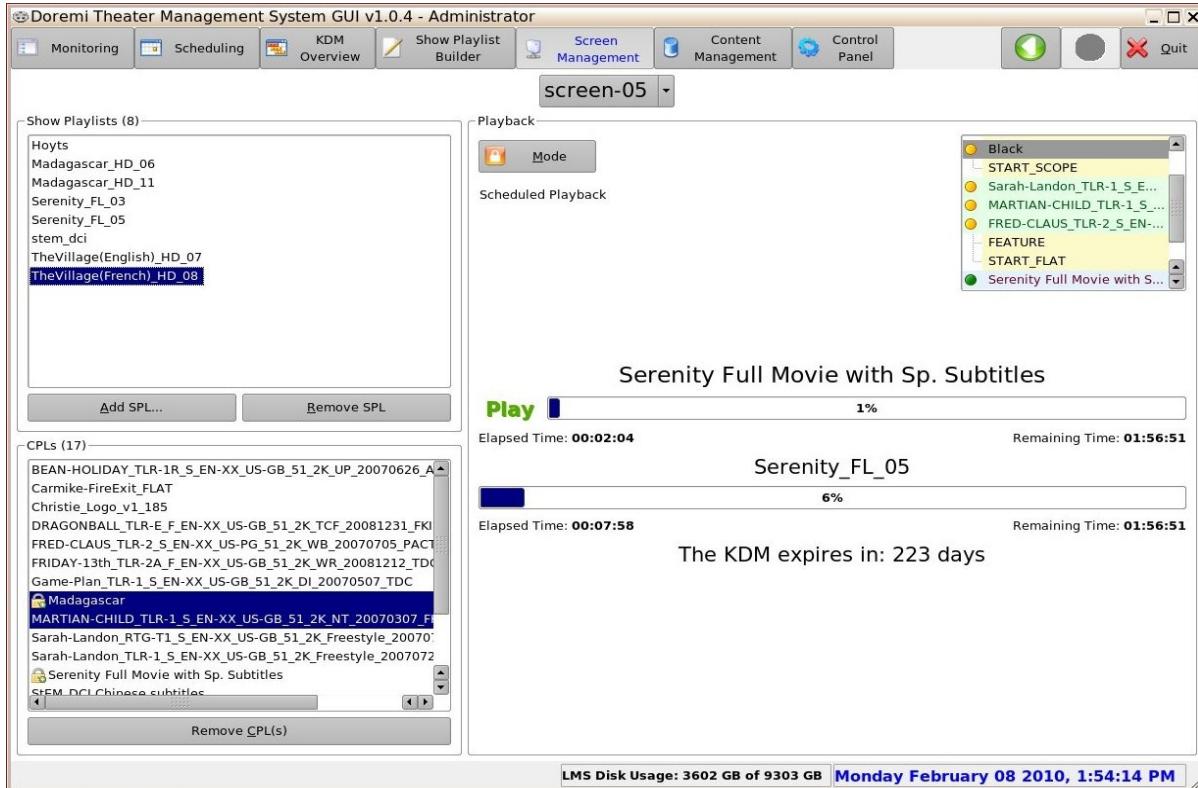


Figure 43: Screen Management Tab – Scheduled Playback Mode

4.6 Content Management Tab

To enter the "Content Management" tab, click on "Content Management" on the top of the GUI, at any time, during the TMS GUI usage. The "Content Management" tab is illustrated below:

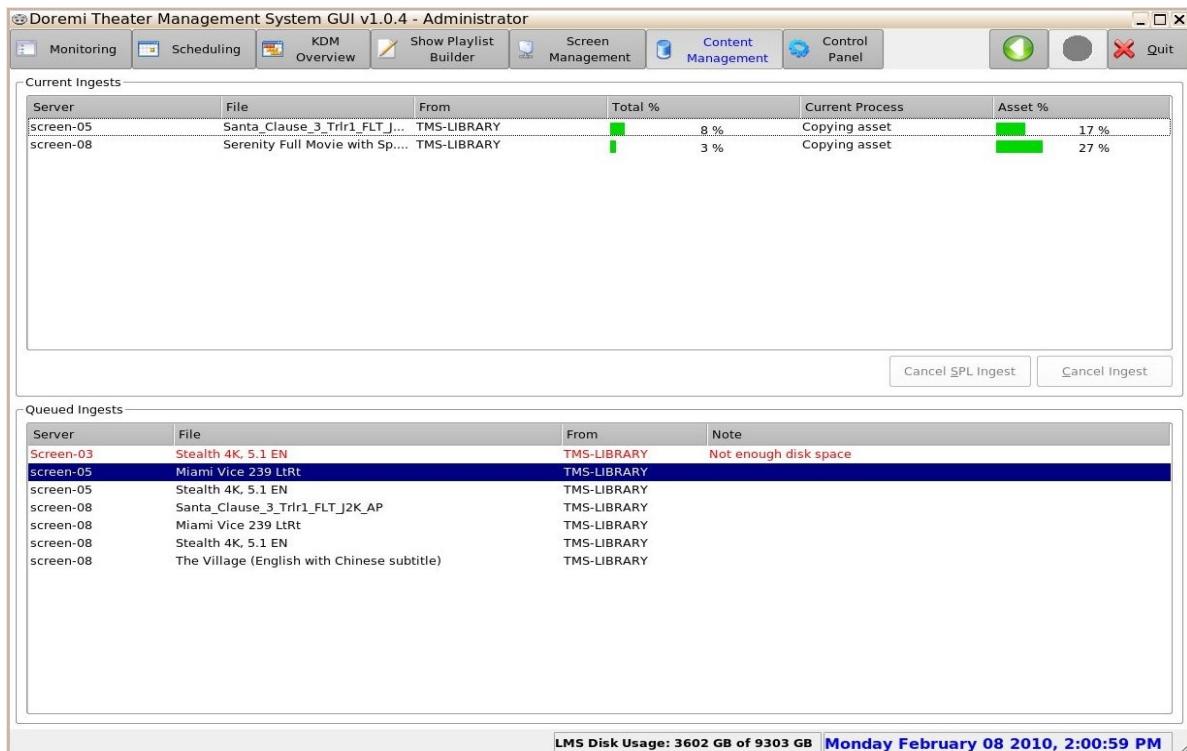


Figure 44: Content Management Tab

In the upper part of the window, all the files that are being ingested will be shown. The lower part of the window will show the ingest queue. The upper part of the tab shows information regarding the percentage of the asset already being ingested.

Note: A server can only ingest one package at a time. Also, trying to ingest content on a screen that has its local storage full will result in the ingest session being put on hold. The "Note" column will display a message that states, "not enough disk space". It will resume once there is enough disk storage space.

Two cancel buttons are available:

- "Cancel Ingest" button will cancel the currently running ingest process.
- "Cancel SPL Ingest" button will cancel the selected running ingest and removes queued content that is part of the same SPL.

Caution: When an ingest is cancelled using the "Cancel Ingest" button, the ingest will be re-started automatically by the TMS. It will not re-start automatically if the associated schedule is deleted from the Scheduling tab (Section 4.2 Scheduling Tab).

Two types of ingest are possible, both Automatic Content ingest and Manual ingest.

- 1) Automatic Content ingest: SPL content will start transferring to the screen if the scheduled SPL content is not present on the screen server.
- 2) Manual ingest: Using the "Ingest SPL ..." button, in the Show Playlist window, see Figure 17.

4.7 Control Panel Tab

4.7.1 Tab Overview

To enter the Control Panel tab, click on "Control Panel" on the top of the GUI. The Control Panel tab can be accessed during TMS GUI usage.

The "Control Panel" tab allows for the user(s) to be logged in specifically as "Admin" or "Manager". The "Control Panel" tab will allow the user(s) to view information about the server. Clicking on the "Control Panel" tab will display the following:

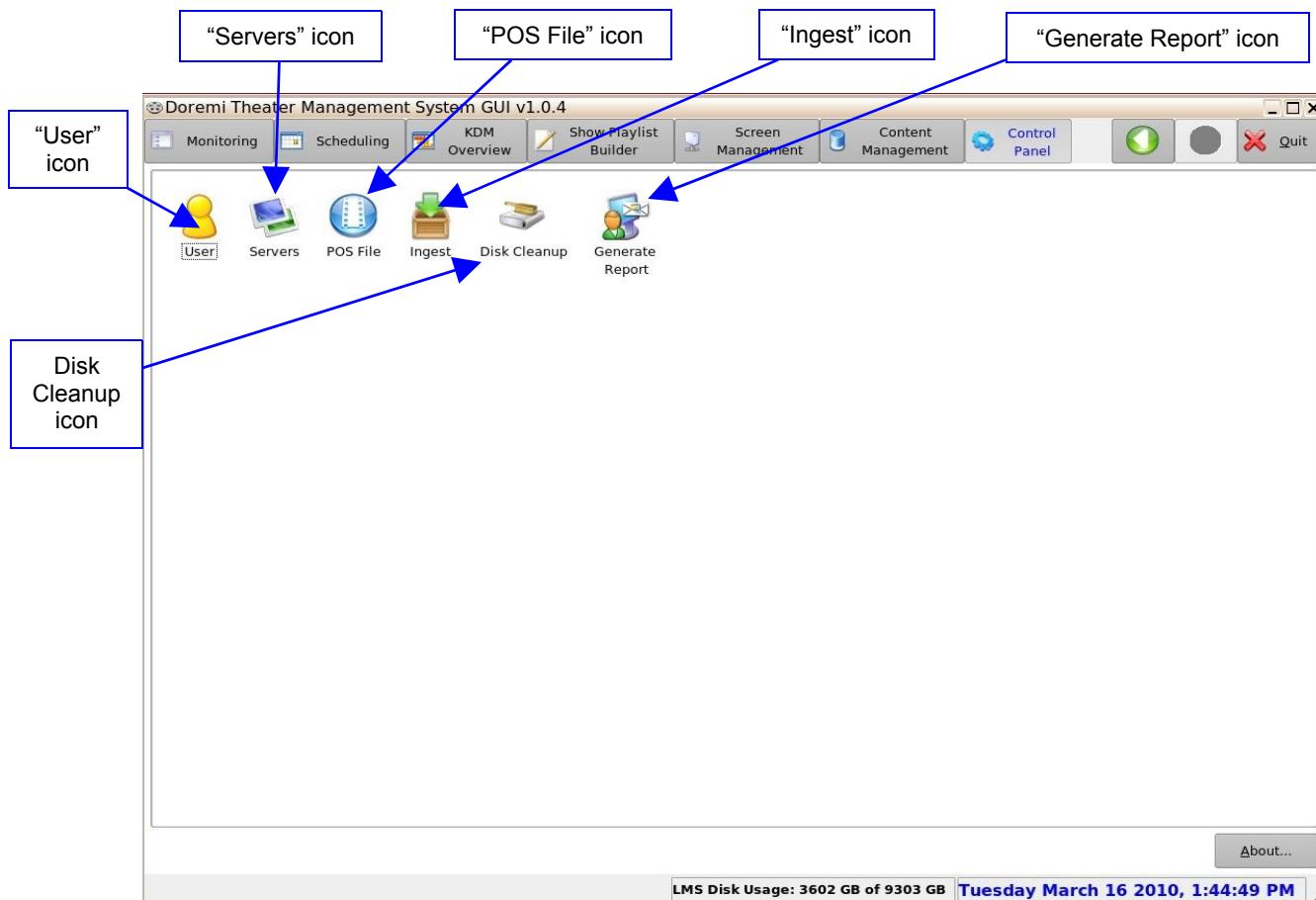


Figure 45: Control Panel Tab

Note: User(s) needs "Admin" privileges to add or remove servers, load POS files and generate reports.

Clicking on the "About" button will provide the TMS version information.



Figure 46: "About" Window Example

4.7.2 User Management

To change the User, double click on the "User" icon (Figure 45). The following "Authentication" window will appear:

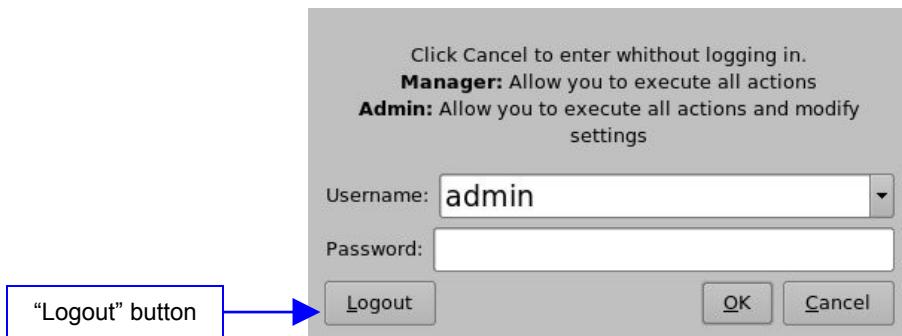


Figure 47: Authentication Window

Choose the appropriate user-name and enter the corresponding password. Once Username and password are entered, click on the "OK" button. To use the TMS without any specific user privileges, click on the "Logout" button. The different rights and privileges associated with each Username are presented in the following paragraph.

4.7.2.1 Admin User's Rights

When logged in as "Admin", the user is allowed to perform all functions, including:

- Edit Links
- Add and Delete Schedules
- Ingest Content on the LMS
- Load a POS File

- Browse and Edit Screen Properties
- Create and Save an SPL
- Control SPL Playback
- Generate Reports
- Upload and Delete KDMs

4.7.2.2 Manager User's Rights

When logged in as "Manager" , the user is allowed to perform only the following functions:

- Edit Links
- Add and Delete Schedules
- Ingest Content on the LMS
- Upload and Delete KDM's
- Create and Save an SPL
- Browse Screen Properties
- Control SPL Playback

4.7.2.3 Simple User's Rights

When not logged in as either "Admin" or "Manager", only the available functions are possible:

- Upload KDM
- Refresh
- Create an SPL (but not save it)
- Browse Screens and Screen Properties (but not edit them)
- Browse Tabs

4.7.3 Screen Edit

To view the information related to the available screens, click on the "Servers" button in the "Control Panel" Tab. The following window will appear:

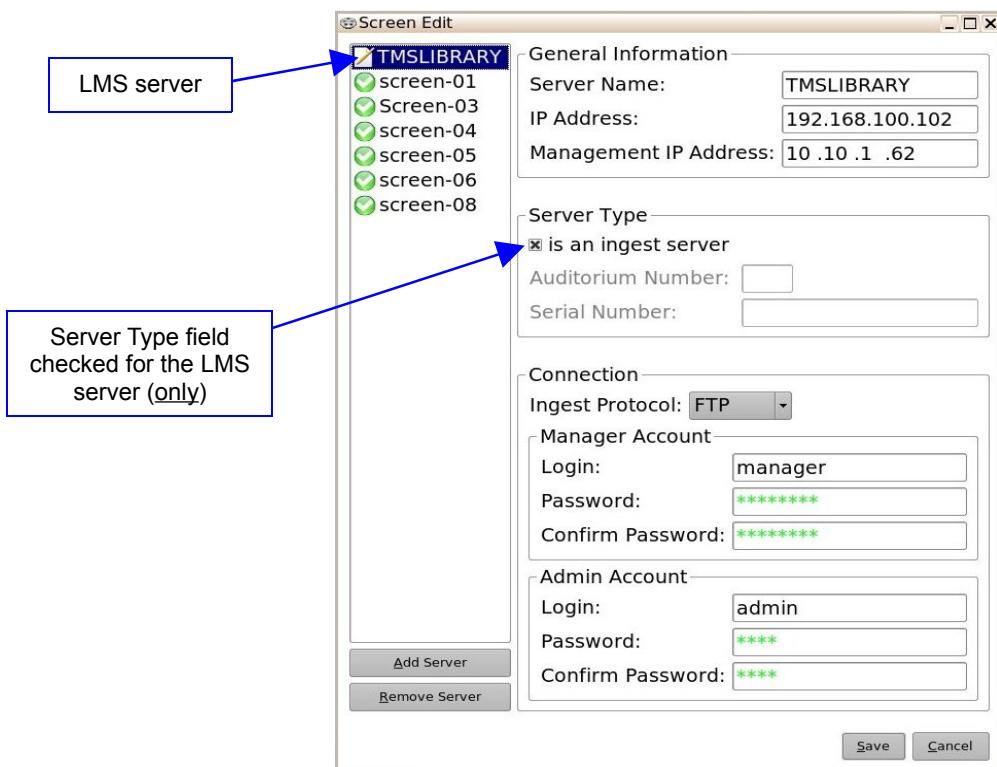


Figure 48: Server Edit Window

Caution: Only the LMS server called, "TMSLIBRARY" will have the "Server Type" field set to "is an ingest server". Make sure that all other servers have this property un-checked.

Note: Only users logged in as "Admin" will be able to edit the screen information. Other users can view the information, but not edit or modify it.

To add a server, when logged in as "Admin":

- Click on the "Add Server" button. A new server will be added to the server list allowing the user to define the settings.
- Click on "Ok" to validate the action (server names can include UTF-8 characters).

To remove a server, when logged in as "Admin":

- Select the desired server in the server list, and click on the "Remove Server" button.
- Click "OK" to validate the operation.

Note: If the "Confirm Password" field does not contain the same password as the "Password" field, the asterisk(*) will be displayed in red and not green. See Figure 49 below:

The screenshot shows a 'Connection' configuration window. It includes fields for 'Ingest Protocol' (set to 'FTP'), 'Login' ('manager'), 'Password' (containing red asterisks), and 'Confirm Password' (also containing red asterisks). The 'Password' field is highlighted with a red border.

Figure 49: Wrong Password

If the keyboard is in "Caps Lock" mode, a lock icon will appear as illustrated below:

The screenshot shows the same 'Connection' configuration window. A blue arrow points from a callout box labeled 'Caps Lock' icon to a small padlock icon located to the right of the 'Confirm Password' input field. The 'Confirm Password' field contains red asterisks.

Figure 50: "Caps" Lock

4.7.4 POS File

A POS file has the date, time, movie title name, and the associated auditorium number of the shows.

To specify the POS file location, click on the "POS File" icon as illustrated in Figure 45. The user(s) will need "Admin" privileges to load a POS file. The following window will appear:

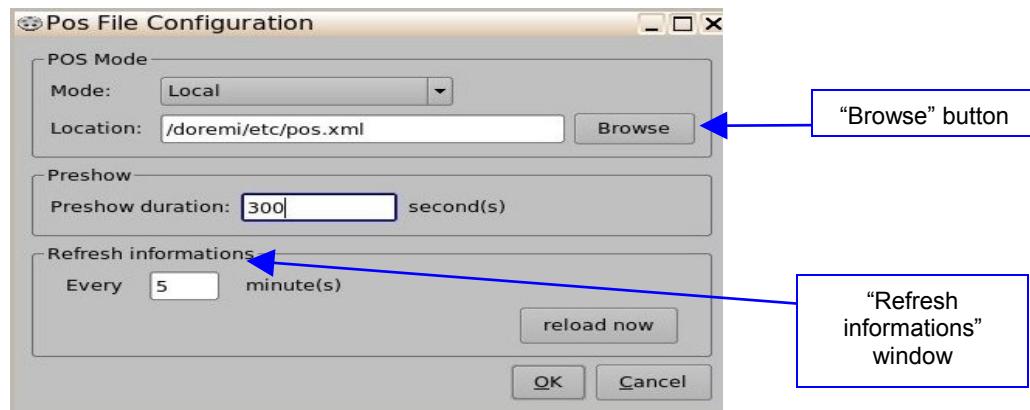


Figure 51: POS File Window

Use the "Browse" button to define the POS file location. The frequency at which the POS file is to be inspected is to be defined in the "Refresh Informations" window. The "reload now" button allows the user to force the TMS to reload the POS file specified in the location field.

The pre-show value will cause all scheduled shows to be delayed by X number of seconds.

In the example above, the value is 300 seconds which equates to 5 minutes.

- Click the "OK" button when finished.

4.7.5 Ingest

The "Ingest" icon allows the user to ingest content on the selected screen. The Ingest GUI is presented below:

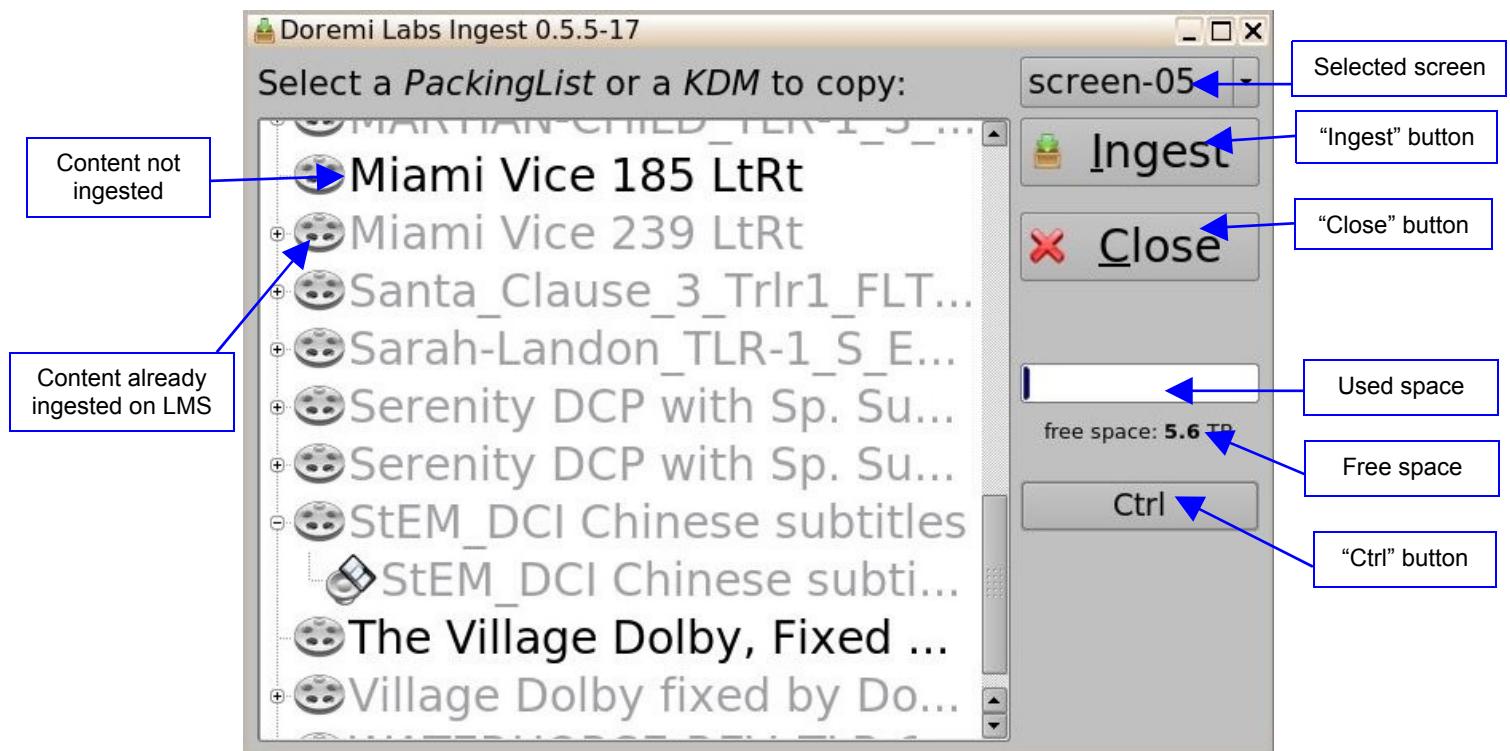


Figure 52: Ingest GUI

- Click on the "Ingest" button to start ingestion of the selected content. To select multiple items,

click on the "Ctrl" button and then click on the desired items. After selecting multiple items, click on the "Ingest" button. The selected items will be reverse highlighted, after being selected for ingestion.

- Click the "Close" button when finished.

Note: The items highlighted in grey have already been ingested on the LMS. The items in black are not ingested.

4.7.6 Disk Cleanup

The Disk Cleanup tool scans for any incomplete CPL packages or orphan asset files. The Disk Cleanup tool helps with freeing up disk space by allowing the deletion of any incomplete content package present on the LMS server.

The disk cleanup utility is run from the Control Panel tab of the TMS software. See Illustration below:

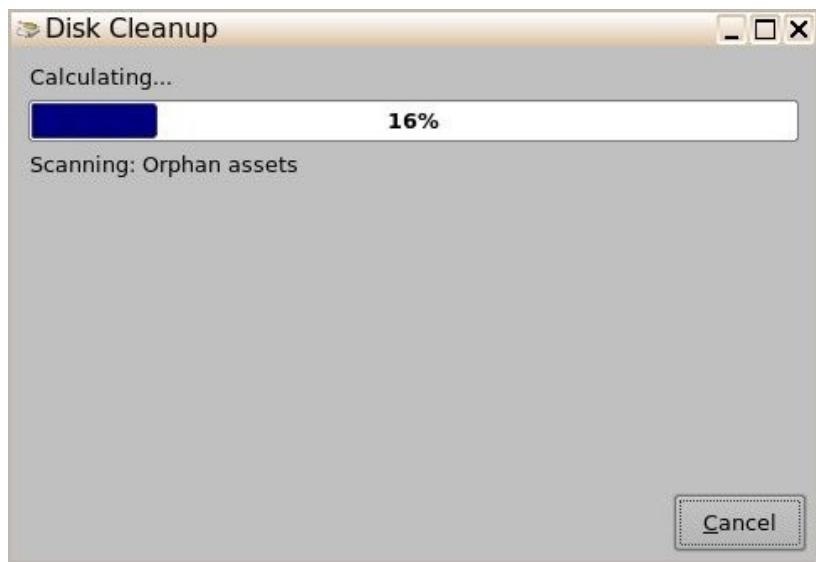


Figure 53: Disk Cleanup of the Orphan Assets

- Select any item that shows a size greater than 0KB, and click on "Continue". See Illustration below:



Figure 54: Orphan Assets Size Checklist

- Once finished with Disk Cleanup of Orphan Assets, the user(s) needs to re-run the Disk Cleanup to make sure that the previously selected Orphan Assets or complete CPLs are cleaned. See illustration below:



Figure 55: Completed Cleanup of Orphan Assets and Incomplete CPLs

4.7.7 Log Report Generation

The user will need to be logged in as "Admin" to generate log reports of the TMS (Section 4.7.2 User Management).

After selecting "Generate Report", on the Control Panel tab, a confirmation window will appear, which will ask about a log report generation. See illustration below:

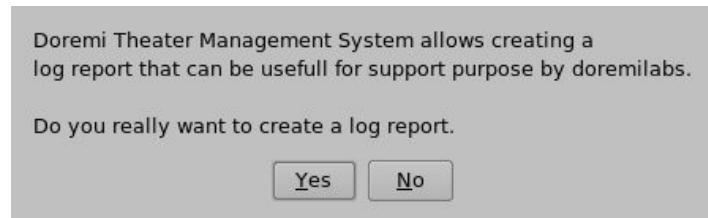


Figure 56: Log Report Generation Confirmation

- Click "Yes" to generate a log report.

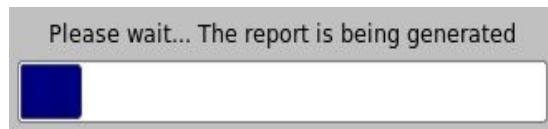


Figure 57: Log Report Generation Progress Bar

- The user will be notified about the file path once the process is complete. See illustration below:



Figure 58: Log Report Notification

- Click on the "OK" button when finished.

5 Annex A: New User Creation

To edit, delete, or create a user account, go to "**Menu → Control Panel**". The following window will appear:

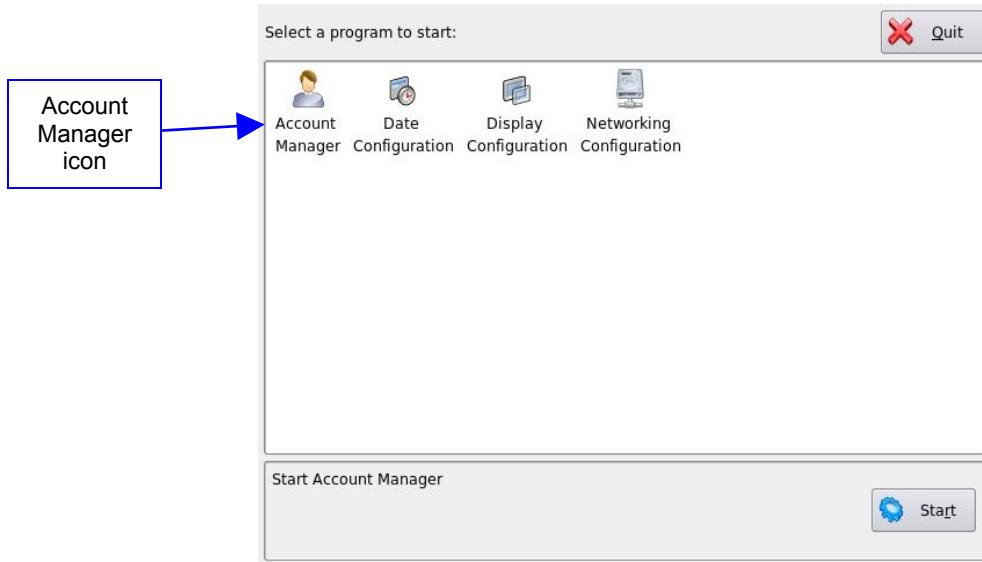


Figure 59: Control Panel Window

- Click on the "Account Manager" icon on the Control Panel Tab (shown above). The following window will appear:

The image shows an 'Account Manager' window. At the top are three buttons: 'Edit' (with a person icon), 'Add' (with a plus sign and person icon), and 'Delete' (with a person and minus sign icon). To the right is a red 'X' button and the word 'Quit'. Below the buttons is a table with columns: 'Login', 'Full Name', and 'Privileges'. The table lists various accounts with their details. The row for 'Elie' is highlighted with a blue background. Blue arrows point from labels to the buttons: 'Edit' points to the 'Edit' button, 'Add' points to the 'Add' button, and 'Delete' points to the 'Delete' button.

Login	Full Name	Privileges
admin	SuperUser Account	SuperUser
dcp	dc	Administrator
doremi	Projection Account	Projection
Elie	Elie	Administrator
games	games	Projection
halt	halt	Administrator
ingest	ShowManager Account	ShowManager
manager	ShowManager Account	ShowManager
operator	operator	Administrator
root	Administrator Account	Administrator
shutdown	shutdown	Administrator
sync	sync	Administrator

Figure 60: Account Manager Window

- To create a new user account, click on the "Add" button. Enter the Username along with the full name. The following window will appear.

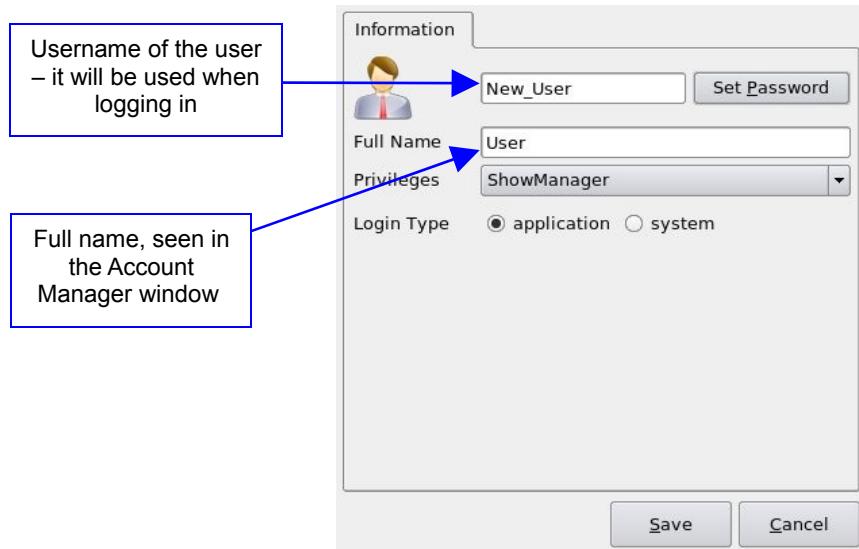


Figure 61: New User Creation - Information Window

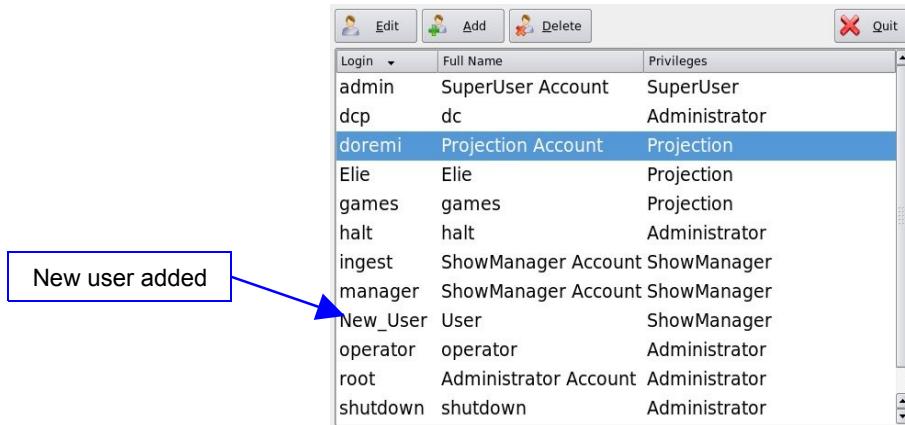
Define the privileges of the new user by listing the account as: ShowManager, Administrator, Projectionist, or SuperUser.

Choose if the account will be an "Application User" or "System User", by checking the appropriate radio button. The two types are described below:

- A Application User has access only to the TMS and the associated files with the TMS.
- A System User has access to the TMS and can log-in to the system from the welcome screen, which is located outside of the TMS GUI.
- Enter the new password, by clicking on the "Set Password" button. The following window will appear:

Figure 62: Password Window

- Click on the "Set" button.
- Click on the "Save" button, to complete the new user process. The following window will appear:



Login	Full Name	Privileges
admin	SuperUser Account	SuperUser
dcp	dc	Administrator
doremi	Projection Account	Projection
Elie	Elie	Projection
games	games	Projection
halt	halt	Administrator
ingest	ShowManager Account	ShowManager
manager	ShowManager Account	ShowManager
New_User	User	ShowManager
operator	operator	Administrator
root	Administrator Account	Administrator
shutdown	shutdown	Administrator

Figure 63: Account Manager Window - New User Added

- To edit an account, select the account and then click on "Edit". The following window will appear:



Figure 64: Information Window - User Edit

The user(s) will be able to edit the full name, privileges, and set the password. The user will not be able to change the login type and username.

- Click on the "Save" button when editing is complete.
- To delete a user, select it in the account manager and click on the "Delete" button.

6 Acronyms

Term	Definition
CPL	Composition Playlist
DCP	Digital Cinema Package
GPI	General Purpose Input
GPO	General Purpose Output
KDM	Key Delivery Message
SPL	Show Playlist
SMS	Screen Management Server
LMS	Library Management Server

7 Document Revision History

Date	Version	Description
09/02/08	1	First Version.
04/08/09	1.1	All sections revised.
04/08/10	1.2	All sections revised.